

Outcomes framework and supporting evidence for the Pregnancy and Parenthood in Young Parents Strategy

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1. Introduction

This paper describes the work to date on the outcomes framework for Teenage Pregnancy and Young Parents. This has been undertaken as part of the on-going development of the National Teenage Pregnancy and Young Parents Strategy. The outcomes framework comprises an outcomes triangle, a strategic logic model and 4 nested logic models corresponding to each of the four strands of the strategic model.

The background to this work and the components of the outcomes framework, including the evidence and plausible theory to support the nested models, are presented here. This is a working document and additional sources of highly processed evidence and any changes in our understanding of teenage pregnancy will be taken into account in further developments of the outcomes framework.

2. Setting the context

The Scottish Government is working with Health Boards, Local Authorities and the third sector to develop a National Teenage Pregnancy and Young Parents Strategy following on from the recommendations of the Scottish Parliament's Health and Sport Committee inquiry in 2013¹. The strategy will be published in 2015 and will emphasise the need for a holistic approach to tackling teenage pregnancy by considering those wider determinants that are key, not just for teenage pregnancy but also for supporting young people more widely in; relationships, education, attainment, training and employment.

The Teenage Pregnancy and Young Parent (TPYP) outcomes framework is designed to help with the development of the Strategy. It runs alongside a policy mapping, an evaluability assessment and a Health Inequalities Impact Assessment. The aim of supporting policy development in this way is to help make it more systematic, explicit and targeted. The outcomes framework has also been created to support and inform policy makers, planners, evaluators and researchers whose work involves, or is linked to, teenage pregnancy. It may also help community planning partners (and others) develop an outcomes-focussed approach to planning and performance management in relation to reducing the level of unintended teenage pregnancy and supporting teenage parents.

3. Outcomes-focused approaches and resources for health improvement

In the 2007 Scottish Budget, the Scottish Government set out a National Performance Framework (NPF) to guide public reporting on progress towards achieving the five cross government strategic objectives: Healthier, Wealthier & Fairer, Safer & Stronger, Smarter and Greener (Scottish Budget, Spending Review, 2007). The NPF also sets out a range of national outcomes which sit below the strategic objectives against which the performance of public sector organisations will be assessed and publicly reported. The Scottish Government tasked NHS Health

¹ Scottish Parliament Health and Sport Committee, Inquiry into Teenage Pregnancy (2013)
<http://www.scottish.parliament.uk/parliamentarybusiness/CurrentCommittees/58031.aspx>

Scotland with providing resources (outcomes frameworks) which help people link local activities with the NPF and move to an outcomes approach.

An outcomes framework generally includes three components (or tools): an outcome triangle, logic models (including indicators & evidence) and multiple results chains.

The **outcomes triangle** presents an overview of a topic area. It presents the outcomes as different level (long term, intermediate and short term) and how they relate to the national outcomes in the NPF.

[DN: Outcomes triangle scoping still to be completed]

Logic models outline the logical sequence of expected changes in achieving progress towards improved health and social outcomes. In effect they are a tool to clarify the activities which can be undertaken and which population group(s) can be targeted to achieve a desired outcome. They also map out the time sequence in which the outcomes are likely to be achieved. These outcomes are referred to as short, medium or long term.

- *Long term or strategic outcomes* are concerned with population health outcomes.
- *Medium or intermediate outcomes* are the determinants of these long term outcomes and can include health behaviours, social, economic and physical environments which shape these behaviours or aspects of the environment with direct health consequences.
- *Short term outcomes* are the more immediate results of service delivery.

Evidence informs the models where it is available but is not a limiting factor. Where evidence (obtained from the sources indicated in section 4.3) is lacking or limited the models are informed by plausible theory.

Long term outcomes are achieved by different sectors working together in partnership. **Multiple results chains** present the same information as logic models but show the contribution of different sectors to long-term outcomes.

[DN: Multiple results chain scoping still to be completed]

Outcomes frameworks can be used or amended to fit local needs. They can help partners clarify the links between the outcomes of the services they provide and the shared outcomes that they are working with partners to achieve. They are not intended to be prescriptive about the services and interventions that should be provided locally. Local judgements should be exercised on the range of services that would be most appropriate and affordable in light of local circumstances and needs.

The process of developing an outcomes framework can also help identify and prioritise key elements or links in the model that should be either monitored or evaluated. Where there is strong evidence of effectiveness, monitoring may be sufficient whilst if there is more limited evidence of effectiveness further evaluation may be warranted.

4. The Teenage Pregnancy and Young Parents outcomes framework

4.1 The Framework

The purpose of the Teenage Pregnancy and Young Parents (TPYP) Outcomes Framework is to identify key outcomes in relation to reducing unintended teenage pregnancy and supporting teenage parents and, informed by both evidence and plausible theory, activities which can contribute to these outcomes. The framework does not try to explain all of the interactions between activities and outcomes and thus does not depict the full complexity of teenage pregnancy. Rather it attempts to clarify some of the key pathways to achieving the short-term, intermediate and longer term outcomes. Ultimately, the framework is a resource for policy makers and planners to help them clarify what outcomes they want to achieve and what can be done to achieve those outcomes.

The outcome framework presents a snapshot of what is currently known about teenage pregnancy and young parents. This should be reviewed and updated to reflect changes in the evidence and our understanding of teenage pregnancy. This is particularly important since external factors such as the deteriorating economic environment may have an impact on the population and it would be important to be sensitive to any changes which take place.

4.2. Development of the TPYP outcomes framework

A collaborative approach was adopted in developing the framework. A core group of key stakeholders were invited to a 'brain storming' session in June 2014 to capture initial ideas for outcomes for the framework and actions which might contribute to those outcomes. This comprised individuals involved in or with links to teenage pregnancy from the Scottish Government, Local Authorities, Health Boards and the Third Sector. Highly processed evidence was reviewed in relation to the key pathways. A draft logic model and supporting evidence was then sent out for wider consultation for comments and, to experts in teenage pregnancy for peer review. The process is on-going and the model has been updated after various meetings and engagement to ensure it reflects on-going discussions. It has been overseen by the TPYP Steering Group, comprising individuals from the Scottish Government, Local Authorities, Health Boards and the Third Sector.

A strategic logic model (below) defines four areas of focus. These are:

- Strand 1 - Strong leadership and workforce (yellow strand)
- Strand 2 - Supportive, youth friendly services (red strand)
- Strand 3 - Education and positive destinations (green strand)
- Strand 4 - Support for young parents (blue strand)

Nested logic models for each of these strands illustrate the areas of activity which are likely to contribute to the medium and long term outcomes and the key pathways through which this would logically be achieved. These pathways are referred to as 'links' and are numbered in the models.

Each model is accompanied by a rationale section. This describes the areas of activity, a description of the link between the activities and short, medium and long term outcomes and an overview of available highly processed evidence and plausible theory informing the links. The evidence largely focuses on the effectiveness of interventions and initiatives which are likely to contribute to the outcomes in the pathways.

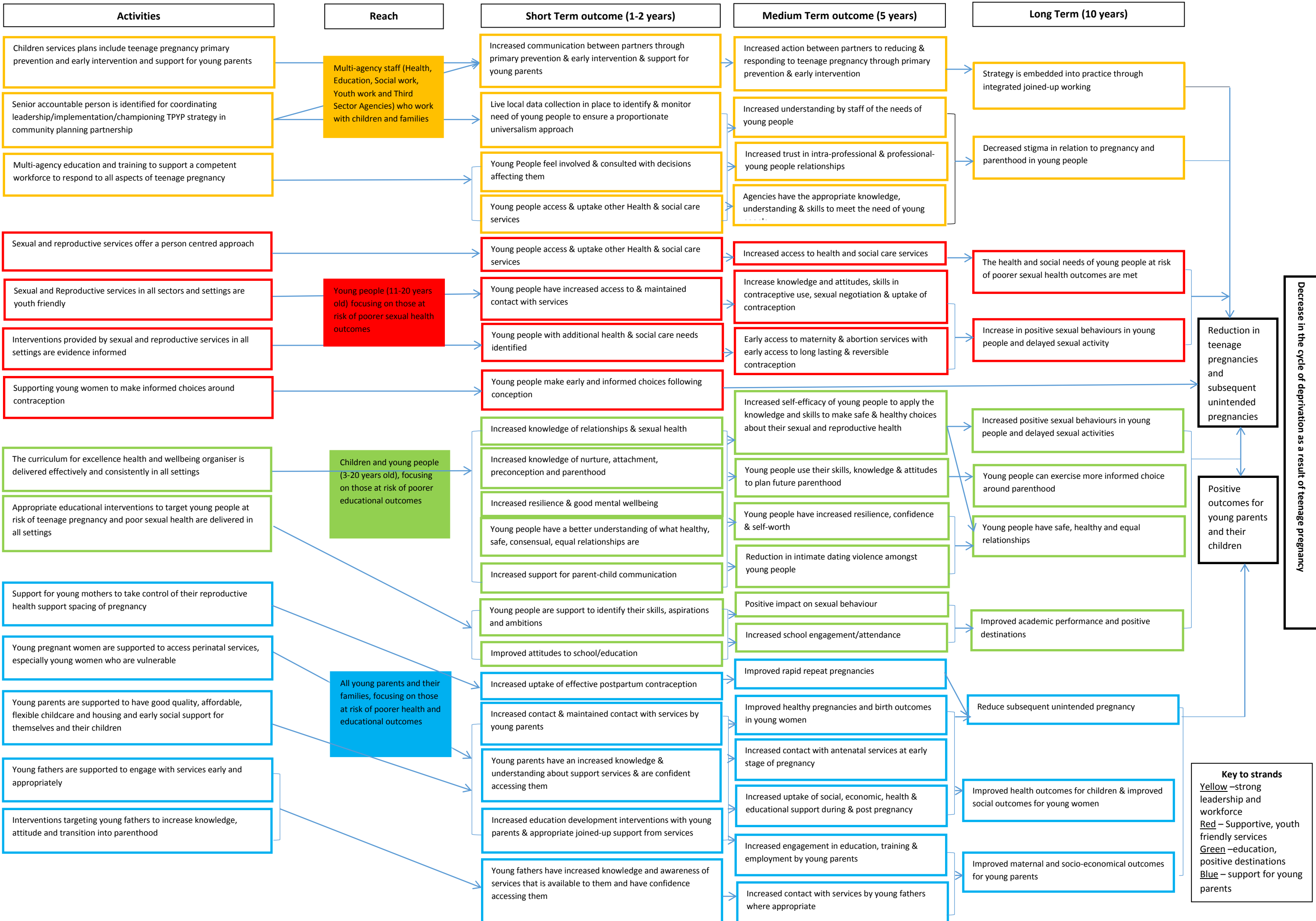
4.3. Evidence

The evidence and/or evidence-informed recommendations used to inform the models has been drawn primarily from a number of key health related sources. It does not represent a comprehensive critical review of all the available evidence. These sources are:

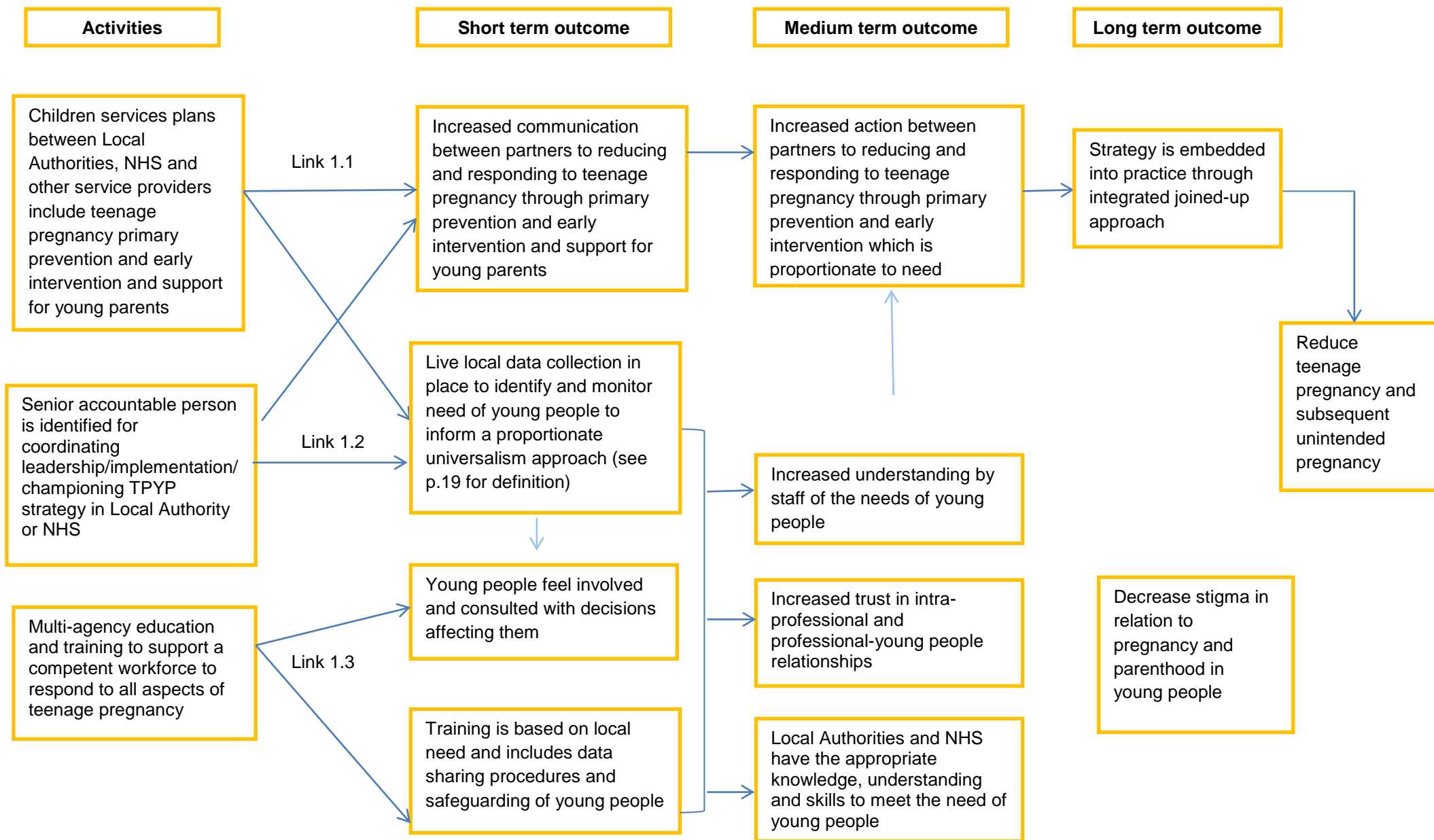
1. National Institute for Health and Care Excellence (NICE) public health guidance (and relevant NHS Health Scotland Commentaries/Scottish Perspectives)
2. National Institute for Health and Care Excellence (NICE) clinical guidance
3. NICE and Health Development Agency (HDA) public health briefings.
4. Publications from the World Health Organization (WHO).
5. Key systematic reviews identified largely through the Cochrane Collaboration, the Evidence for Policy and Practice and Co-coordinating Centre (EPPI) and the Campbell Collaboration,
6. Key reviews and evaluation reports commissioned by the Scottish Government, the UK Government and national organisations and collaborators.

We have called this information 'highly-processed evidence'. Highly processed evidence summarises high quality research that has been quality assured. As such it is less subject to bias and therefore we can be more confident that the findings are reliable. However, limitations and caveats in the evidence base remain. For details of the limitations of the research examined in reviews please consult the original reviews. Much of the evidence is drawn from evaluations of studies in North America and other countries where the health, social care and education systems are different to those in Scotland, Where the evidence is largely from outside Scotland the applicability of the evidence to the Scottish context should be considered carefully as results may not replicate in a different context.

For a variety of reasons we do not always have 'good evidence' from these sources. This lack of highly processed evidence, however, does not necessarily mean there is no link between two components in a logic model nor that evidence of effectiveness does not exist. The research may not have been done or findings may not have been reported or reviewed alongside other similar studies. Lack of highly processed evidence should not necessarily prevent us from acting if there is plausible theory or emerging practice to explain the links in the models. However, we may proceed with more caution than where there is good highly processed evidence.



Strand 1: Leadership and workforce



Rationale for nested model 1: Strong leadership and workforce

Introduction

This section should be read in conjunction with the 'Strong Leadership and Workforce' strand of the Teenage Pregnancy and young parents (TPYP) Outcomes Framework. It focuses on leadership through the development of Children's Service Plans informed by local need and, the development of a competent workforce to respond to all aspects of teenage pregnancy.

Activity: Children services plans between Local Authorities, NHS and other service providers include teenage pregnancy primary prevention and early intervention and support for young parents

Link 1.1

Local services relating to teenage pregnancy and young parents are developed in a more comprehensive and integrated way through shared Children Service Plans. This will increase communication and joint working between partners and, contribute to increased coordinated action to reduce and respond to teenage pregnancy through primary prevention and early intervention. This in turn will contribute to the strategy being embedded into practice through an integrated joined-up approach. In order to ensure the local plans are meeting the needs of young people they should be informed by live, local data and the views of young people.

Activity: Senior accountable person is identified for coordinating leadership/implementation/championing TPYP strategy in Local Authority or NHS

Link 1.2

In order to achieve increased buy-in by partners to reducing teenage pregnancy and support for young parents, an accountable person should be identified to drive forward implementation at a local level and link with all sectors (NHS, Local Authorities and Third Sector agencies). This will ensure that local data is collected and used to inform service development and workforce capacity building. This will contribute to services being needs lead; staff having a greater understanding of, and skills to support, the needs of young people; and, greater trust within professions and services as well as between professions/services and young people. This will contribute in the longer term to a decrease in stigma to pregnancy and parenthood in young people.

Evidence/plausible theory

Part 3 of the Children and Young People (Scotland) Act 2014¹ introduces new planning and reporting duties to a range of public bodies. It places overarching

responsibility for the development of plans for services that safeguard, support and promote the wellbeing of children and young people jointly with local authorities and health boards. The Act places a duty on each local authority and the relevant health board to jointly prepare a Children's Services Plan for the area of the local authority, covering a 3 year period. Children's Services Plans should be prepared with a view to achieving the aim of providing children's services and related services in the area in a way which: best safeguards, supports or promotes the wellbeing of children; ensures that any action to meet needs is taken at the earliest appropriate time and that, where appropriate, action is taken to prevent needs arising; is most integrated from the point of view of the recipients; and, constitutes the best use of available resources.

In order to ensure that Children Service Plans, developed as part of the Children and Young People (Scotland) Act 2014, are meeting the needs of young people they should be informed by "live", local data. The use of local data is essential for understanding local circumstance in relation to pregnancy and parenthood in young people. Where appropriate, agencies should share data and risk assess as part of a joined up strategy to understand the needs of the local population i.e. those potentially at risk of a pregnancy at a young age, and young parents. The data sharing through the Children and Young People (Scotland) Act 2014 will aid strategic planning and will help the provision of integrated services that meet the needs of those who use them.

Views of young people and staff

A number of reviews have explored the views of young people and young parents about accessing sexual and reproductive; ante-natal and other health and social services. They highlight the need to take the views of young people into account in developing services.

There is review level evidence that young people identify a range of personal and service based barriers that influenced their decision to use of sexual health services generally and school based or school link services.^{2,3} These include:

- Embarrassment about discussing sex and using services.
- Perceptions of trust and legitimacy of services.
- Concerns about the attitudes of staff.
- Perceptions about the physical environmental of sexual health service.
- Accessibility, visibility and flexibility of services.

Pregnant young women often have complex social needs across health, social and educational sectors. A review of UK studies of young people and young parents suggests that they are discouraged from accessing services due to a range of factors including⁴:

- Being overwhelmed by the involvement of multiple agencies.
- Unfamiliarity with care services.
- Practical problems making attendance at antenatal services difficult.
- Difficulties communicating with healthcare staff.
- Anxieties about attitudes of healthcare staff.

Young parents have a wide range of social, health and educational needs (including housing, childcare, engaging in education and employment). A review⁵ of 5 UK qualitative studies suggests that young people's preferences in relation to these needs are varied. It is plausible that increased access to the range of available choices will enable young people to make more informed choices about how best to meet these needs. More co-ordinated service could contribute to young people being able to access appropriate information and advice to make choices appropriate to their needs and circumstance.

The evidence also suggests that staff have concerns about the limited availability of resources for sexual health services and the need for agencies to be well organised and working more effectively in partnerships².

[NICE PHG 51](#)⁶ recommends:

- Contraceptive services for young people should be informed by local data and the voice of young people. Regional and local data on contraception uptake and sexual health inequalities, as well as local service provision, activity and capacity, across sectors, should be collected and disseminated and used to inform an action plan, setting out organisational responsibility for local services for young people, including those who are socially disadvantaged.
- Coordinated and comprehensive contraceptive services are developed and delivered. This includes: ensuring priorities and targets are based on local need and using a collaborative evidence-based commissioning process to ensure that comprehensive services are developed. Joint commissioning of services should also include comprehensive referral pathways, across termination, maternity, genitourinary medicine, pharmacy and other relevant health, social care and children's services and should cover youth and community services, education and third sector organisations.

[The NICE clinical guidance 110](#)⁷ recognises the need for many young pregnant women to access a range of services across health and social care and highlights the importance of effective communication between agencies to ensure women have their needs met through best use of all available services and support. The guidance recommends:

- Local data is used to tailor services to meet the needs of pregnant women with complex social factors (including pregnant young women).
- Young pregnant women are involved in the development of antenatal care through monitoring their experience of care and engaging them in determining local needs and how these may be met.
- Partnership working with local education authorities and third-sector organisations to contribute to improved access to and continuing contact with antenatal services.

Summary

- The Children and Young People (Scotland) Act 2014 places a duty on each local authority and relevant health board to jointly prepare a Children's Services Plan which is informed by 'live' and local data.
- There is review level evidence to suggest that young people identify a range of personal and service based factors which influence their access to contraceptive

and antenatal services.

- NICE guidance recommends that contraceptive and, antenatal services are informed by the views of young people/parents and local data.
- NICE guidance recommends the development of coordinated and comprehensive contraceptive service and ante-natal services and, greater partnerships working to improve access to antenatal services.
- Review level evidence suggests that young parents have varied preferences in relation to their health, social and educational needs. More coordinated services may help them access appropriate information and advice to make choices appropriate to their needs and circumstances.

HIA Note:

The evidence specifically includes research on the views of young people who were social disadvantaged and excluded as well as young parents.

Activity Multi-agency education and training to support a competent workforce to respond to all aspects of teenage pregnancy

Link 1.3

Workforce development activities are developed and informed by local data and the views of young people. This will result in training, based on local need, being delivered across the range of different services working with children and young people. This will contribute to staff across all sectors having the appropriate knowledge, attitudes and skills to understand the needs of young people and work effectively with them to meet their needs and aspirations; and, greater intra-professional and professional-young people trust and relationships

It must be recognised that this activity is dependent on local decisions around use of resources and priorities for training based on local need. It is also dependent upon the capacity of services and staff to deliver in this field (e.g. staffing levels and workforce planning, allocation of workloads).

Evidence/plausible theory

Service provision

A number of reviews have examined the views of young people about access to contraceptive and, ante-natal and maternity services. Attitudes of staff and the way in which young people are treated by staff emerge as a barrier to young people accessing these services^{2,3,4}. This is also reflected in a review of the views of young fathers⁸ and is consistent with a review examining youth access to health services more generally which suggests that young people identify staff attitudes and communication as important aspects of effective healthcare provision.⁹

The importance of a competent workforce and staff training is a consistent finding from reviews of service provision.

- A review of reviews of sexual health services for young people identifies non-judgemental staff with suitable interpersonal skills and training to work with young people as a key area for consideration in developing services.¹⁰
- A systematic review of school based and school linked services identified access to continuing professional development for staff as one of the principles that should inform service development.³

Guidance from WHO and NICE recommend appropriate training and supervision for those delivering services for young people:

- [The WHO framework for development of adolescent-friendly health services](#) states that one component of effective services for young people is the provision of care providers who have the required competencies.¹¹ A review of youth friendly services in primary care suggest that staff training is associated with improved access to services by young people.¹²
- [NICE Public Health Guidance 51](#) recommends that training and support is provided for all staff involved in the management and provision of contraceptive services for young people. This training should include: training on contraceptives; sensitivity to and communication with young people, particularly those who are socially disadvantaged and from vulnerable groups or different ethnic and faith communities; confidentiality and child protection issues; and, awareness of referral pathways. The guidance also highlights the need for systems to monitor the maintenance of skills and experience.⁶
- [NICE Clinical Guidance 110](#) on complex pregnancies recommends training on multi-agency needs assessment as well as national guidance on information sharing and specific training in relation safeguarding and consent.⁷

RSHP and Social and emotional wellbeing

A competent and confident workforce emerges as a theme in a number of reviews concerning Relationship Sexual Health and Parenthood education (RSHP) and emotional and social wellbeing programmes in all settings.

- A review of sex and relationship education programmes (SRE) concludes that a key characteristic of effective SRE programmes is delivery by trained educators.¹³
- Similarly evidence from a review of common characteristic of effective SRE by Kirby indicates that training, monitoring, supervision and support of 'educators' is one of the key characteristics of successful curriculum based SRE programmes.¹⁴

[Public Health Guidance 20](#) on social and emotional wellbeing in secondary education recommends training and continuing professional development for all practitioners, in education, health, social care and third sector, who work with young people in order to ensure the workforce has the knowledge, understanding and skills to support the social and emotional wellbeing of young people.¹⁵

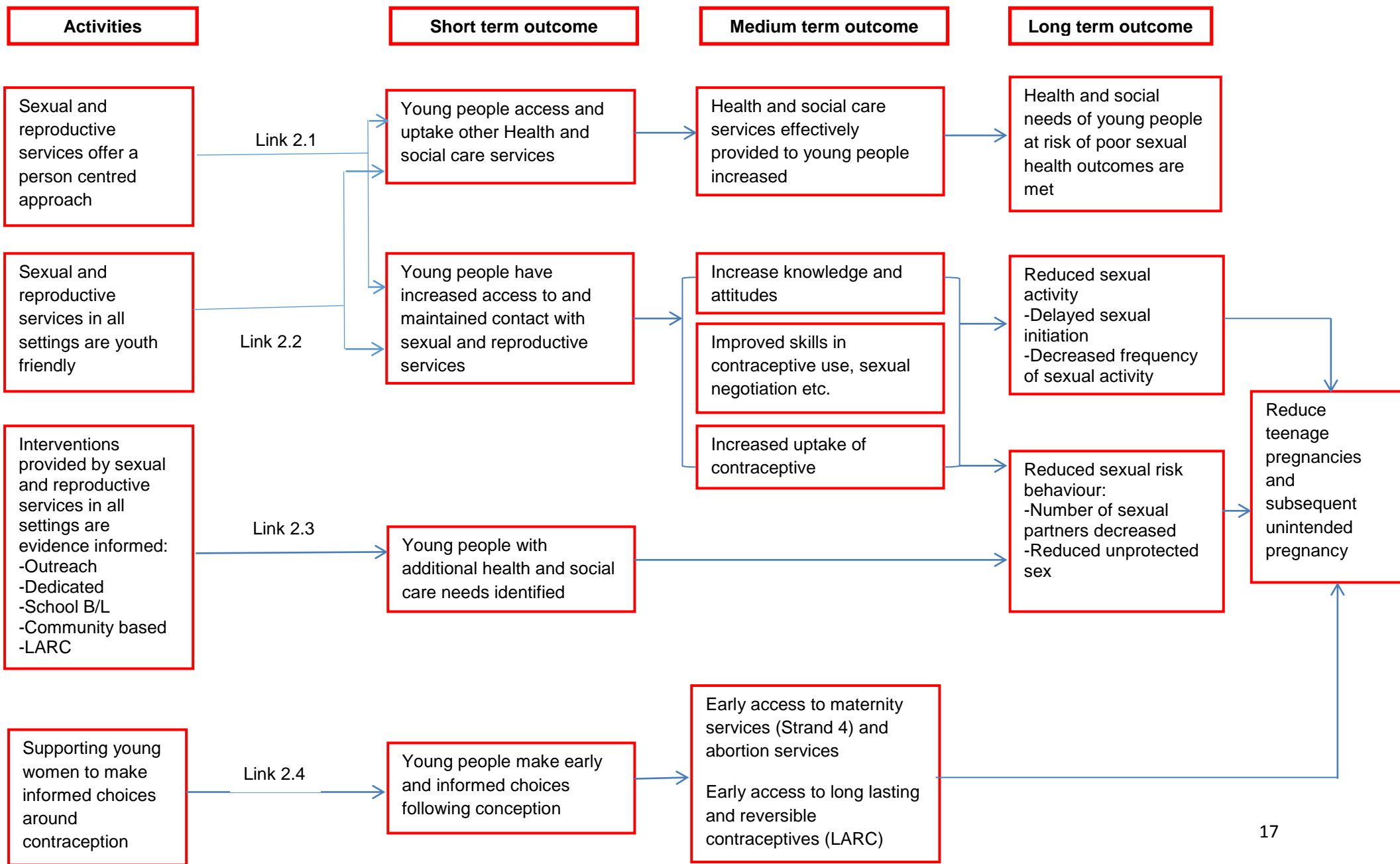
Summary

- There is review level evidence to suggest that attitudes of staff can act as a barrier for young people to access reproductive and sexual health services and, antenatal and maternity service.
- Review level evidence, WHO and NICE guidance suggests that staff training is a key factor in successful delivery of reproductive and sexual health, ante-natal and other service provision for young people.
- Review level evidence suggests that staff training, monitoring and support/supervision is important for effective delivery of RSHP and social and emotional wellbeing programmes for young people.

HIA Note:

The evidence specifically includes research on the views of young people who were social disadvantaged and excluded as well as young parents.

Strand 2: Supportive, youth friendly services



Rationale for Strand 2: Supportive, youth friendly services

Introduction

This section should be read in conjunction with the 'Supportive, Youth Friendly Services' nested model of the Teenage Pregnancy and young parents (TPYP) Outcomes Framework. It focuses on the contribution of sexual and reproductive health service provision in health, educational and community setting.

One of the long term aims of service provision is to reduce unintended pregnancy. However, it is not always possible or appropriate to evaluate all service based interventions in terms of their impact on this outcome. Instead services are often evaluated in terms of the short term outcomes described in the models such as: increasing access to, and knowledge about, services, products and information; and, medium terms outcomes such changes in sexual risk behaviour.

Activity: Person-centred sexual and reproductive health services

Link 2.1

The provision of sexual and reproductive health services which are person-centred will help enable;

- the additional health and social care needs of vulnerable young people to be identified and actions taken to meet these need. This will contribute to young people having increased access to the range of health and social services that can meet their needs. This in turn will contribute to improved health and social care outcomes for young people.
- young people to more easily and readily access information, support, products and services to meet their sexual health needs. This will contribute to young people having improved knowledge and skills to negotiate relationships, manage their sexual health and practice positive sexual behaviour which in turn will contribute to an increase in positive sexual behaviour and delayed sexual activity amongst young people.

Both of these outcomes will contribute to a reduction in early unintended pregnancy.

Evidence/plausible theory

Young people at increased risk of unintended pregnancy tend to have complex social needs and therefore require a range of services across health and social.¹⁶ It is plausible that a person centred approach within sexual and reproductive services will enable these needs to be identified and actions taken to meet these need and thus reduce the risk of unintended pregnancy.

[The Healthcare Quality Strategy for NHSScotland](#)¹⁷ outlines the health services commitment to reducing inequalities; eliminating discrimination and protecting human rights. It aims to achieve this through recognising and valuing diversity, promoting a person-centred approach and involving people in the design and delivery of healthcare.

Activity: Sexual and Reproductive services in all sectors and settings are youth friendly and proportionate to need

Link 2.2

The provision of sexual health and reproductive services that are needs led, relevant and accessible to young people will enable young people to more easily and readily access to information, support, products and services to meet their sexual health and other health and social care needs. This will contribute to young people having improved knowledge and skills to negotiate relationships, manage their sexual health and practice positive sexual behaviour which in turn will contribute to an increase in positive sexual behaviour and delayed sexual activity amongst young people. Youth friendly services will also contribute to the additional health and social needs of young people being identified and actions taken to meet these needs.

Both these outcomes will ultimately contribute to a reduction in early unintended pregnancy.

Services should be universal but also proportionate to need, specifically targeted and tailored to those at increased risk of unintended teenage pregnancy and/or poor sexual health outcomes.

Evidence/plausible theory

Youth friendly services

A review of views of young people identified a range of factors that influence young people's access to sexual health services. These include: lack of knowledge of and trust in services; beliefs about services; accessibility issues; appointment times; concerns about anonymity and confidentiality; the physical environment of services; the nature of consultations; access to respectful and non-judgemental staff; costs; and, anxiety.²

A recent review, drawing on both quantitative and qualitative research about young people views on access to health services suggests that young people value accessibility, staff attitudes, communication, guidance driven care, an age appropriate environment, involvement in health care and achieving health outcomes as particularly important for health service provision.⁹

There is a growing recognition that young people need services that are sensitive to their unique stage of biological, cognitive, and psychosocial transition into adulthood. Drawing on the best available evidence and a rights-based approach to healthcare, the World Health Organisation (WHO) promote adolescent-friendly services based

on the principles of accessibility, acceptability, equity, appropriateness and effectiveness.¹¹

There is review level evidence that the provision of youth-friendly services in primary care is associated with improved access to services. The review suggests there is a more limited body of research examining the impact of youth-friendly services on health outcomes or the relative effectiveness of different models. There is promising evidence from 3 studies of mixed quality that youth friendly sexual and reproductive health services may improve sexual risk behaviour.¹² The review also suggests that training for service providers can improve performance in addressing youth health issues (see strand 1).

[NICE Public Health Guidance 51](#)⁶ recommends that young people have access to dedicated young people's contraceptive services which are appropriate to their needs, comprehensive, timely, flexible and accessible and meet recognised criteria for youth-friendly services such as the 'Your Welcome' criteria.

Tailored services for socially disadvantaged young people

Socially excluded young women are at increased risk of early unintended teenage pregnancy. This includes young people who are: in poverty and/or living in areas of deprivation; in or leaving care; homeless; truanting or excluded from school or who perform poorly at school; involved in crime; children of teenage parents; and, from some ethnic minority groups.¹⁶

Proportionate universalism is the principle that services should be universal and inclusive but that additional and tailored support should be offered to those who are socially disadvantaged or find it difficult (due to their faith or other factors) to access services¹⁸. The evidence suggests that proportionate universal is important in reducing health inequalities^{19,20}. It is plausible that additional tailored and targeted services for vulnerable populations at increased risk of teenage pregnancy will contribute to an increase in positive sexual behaviours in these populations and in the longer term a reduction in unintended teenage pregnancy.

Recent reviews of interventions in healthcare and educational settings to encourage young people, particularly those who were social disadvantaged to use contraceptives and contraceptive services noted that many of the studies did not include information about socio-economic status or ethnicity. Therefore drawing conclusions about the effectiveness of service interventions in reaching socially disadvantaged young people was difficult.^{21,22}

The review of services in healthcare settings concluded that there is reasonable evidence from five studies that outreach services, some of which specifically targeted socially disadvantaged young people, were effective in increasing access to mainstream reproductive and sexual health services.²¹

There is promising evidence from two UK evaluations that services targeted at areas of deprivation may increase access. The evaluation of *Healthy Respect* in Scotland found that services targeting young people from the most deprived areas were effective in engaging these young people to access sexual health drop in services²³.

An evaluation of the *Brook Sexual Health Outreach in Schools* programme reported increased access to services, particularly amongst young men, young people with low educational attainment and those who are excluded from school²⁴.

There is evidence from one good quality study that an intensive and comprehensive community intervention targeting teen mothers was effective in reducing repeated pregnancy and consequent birth (Pathways) and from another that intensive community programmes for socially disadvantaged young people (Carrera project) can have positive impact on sexual behaviour and pregnancy. However an English adaptation of the latter programme found negative effects though the study had significant limitations.²⁵ Other evidence informed intervention targeting young mothers can be found in strand 4.

[NICE Public Health Guidance 51](#)⁶ recommends that services should be tailored to meet the needs of social disadvantaged young people. This includes the provision of additional and relevant support to enable immediate access to services (for example trained interpreters and facilities for those with disabilities); working in partnerships with other services (such as family-nurse partnerships and children's centres) to support young mothers to use services; support and referral to special services (for example for substance misuse, gender based violence); outreach services; and, culturally appropriate, non-judgemental empathic and tailored information and support to meet the needs of the young people.

Specific populations

- Limited highly processed evidence was identified about the effectiveness of interventions to address poor sexual health and teenage pregnancy in looked after children. A review of reviews suggested there is promising evidence from the USA that *Multidimensional Treatment Foster Care* (MTFC-A), an intensive and tailored fostering programme, is effective in improving health and social outcomes including a reduction in pregnancy rates.¹⁰ However an evaluation of this approach in England found no evidence that MTFC-A resulted in better outcomes than usual care, except amongst those with high levels of antisocial behaviour. However sexual health outcomes were not measured in this evaluation.²⁶ NICE Public Health Guidance 28²⁷ sets out how agencies and services can work together to improve the quality of life (that is, the physical health, and social, educational and emotional wellbeing) of looked after children and young people. It does not provide detailed information on health promotion.
- Recent reviews of interventions to improve sexual health behaviour and reduce unintended pregnancy amongst homeless young people found a limited body of research. The reviews suggest that interventions offered in isolation appear to have limited impact on sexual health behaviour among shelter, drop-in and street-recruited youth. Interventions which target multiple risk behaviours/needs (substance use, mental health and housing) may be needed to reduce sexual health risk-taking.^{28,29,30}
- No highly processed evidence was identified about services for Black and Minority Ethnic Communities. However it should be noted that Black and Minority Ethnic communities are diverse and have different needs. It is plausible that in

some communities targeted services may be appropriate and help increase access to information and services.

NOTE: Actions to reduce health inequalities, including inequalities in unintended teenage pregnancy, need to address the social determinants of these health issues. This includes addressing the fundamental causes of inequality (inequalities in power, money and resources) and the wider environmental influences (for example, education and learning, work and the physical environment).²⁰ Actions to address some of the latter are included in strand 3.

Summary

- There is review level evidence that young people experience a range of personal and service barriers to accessing service.
- NICE and WHO guidance recommends the provision of youth friendly services and there is review level evidence that youth friendly services increase access to services and may contribute to reduced sexual risk behaviour. However the evidence is based on relatively poor quality research.
- Proportionate universalism is an important contributor to reducing health inequalities and NICE public health guidance recommends tailoring sexual health services for socially disadvantaged young people.
- There is review level evidence that targeted outreach programmes, some specifically targeting socially disadvantaged young people, can increase access to services.
- There is some evidence that targeted intensive community based interventions which include a sexual health services are effective in improving sexual behaviour and reducing pregnancy however transferability to the UK is questionable.
- There is limited highly processed evidence about interventions specifically targeting looked after and accommodated young people, homeless young people and young people from various Black and ethnic minority communities. Interventions targeting multiple risk behaviours and needs may be most appropriate for homeless young people.

HIIA Note:

The evidence includes research on the views of and programmes targeting socially disadvantaged young people and those from particularly vulnerable populations.

Activity: Interventions provided by sexual and reproductive services in all settings are evidence informed

Link 2.3

The provision of evidence informed sexual and reproductive health services will enable young people to access a wide range of advice, treatment and support which is of high quality, appropriate and timely. This will contribute to young people making healthy and informed choices about their sexual and reproductive health which in

turn will contribute to an increase in positive sexual behaviour and delayed sexual activity. This will ultimately contribute to a reduction in early unintended pregnancy.

This should be done in conjunction with formal (school) and informal (youth work/services) education [see stand 3].

Evidence/Plausible theory

Views of young people

A review of UK qualitative research about the views of young people suggests that young people have gaps in their knowledge about sexual activity, use of contraception and emergency contraception (EC) and where to access contraception; and, value trustworthy and legitimate services which they feel more confident in using. It is plausible that knowledge and attitudes held both by young people and service providers are likely to influence use of contraception and contraceptive services by young people.²

Service provision model

A review of contraceptive service and interventions in healthcare setting concluded that there is moderate evidence from five reasonable quality studies, two from the UK and three from the USA, that adding outreach programmes to mainstream services is effective in encouraging young people to access and maintain contact with contraception services. The extent to which these services had a positive effect on sexual behaviour and reducing unintended pregnancy is unclear due limited high quality studies. Two studies reported a positive impact on use of contraception, one of which also reported reduced reported pregnancy.²¹

A recent review of health-led contraceptive services found mixed evidence from 4 studies about the effectiveness of comprehensive multicomponent interventions. In the two studies showing evidence of effectiveness, the provision of LARC within these programmes was particularly important in reducing repeat pregnancy in adolescents. In one study failure to use LARC was the strongest predictor of repeat pregnancy.²¹

A review of reviews identified 10 key areas for consideration when developing and delivering services for young people¹⁰:

- Inclusion: accessible to everyone regardless of, for example, ethnicity, gender, physical ability.
- Access: located conveniently for young people and at times to meet their lifestyle.
- Comprehensive: offering a full range of services including contraception and sexual health advice, pregnancy testing and counselling.
- Staff: welcoming and non-judgemental with appropriate interpersonal skills and training to work with young people.
- Service environment: youth friendly with positive images and comfortable surroundings.

- User involvement: young people involved in the delivery and maintenance of service.
- Policy development: clear policies and procedures covering confidentiality, consent and child protection.
- Marketing: service actively promoted to develop awareness.
- Partnerships: partnership working to enable referral between agencies and services.
- Evaluation and review: build evaluation and review into services to ensure quality of service provision.

Long-acting reversible contraceptives (LARC)

Most unintended pregnancies result from either not using contraception at the time of conception or inconsistent or incorrect use of contraception³¹. A review to support the NICE clinic guidance on LARC found strong evidence that LARC is more effective than other forms of contraception as it is less reliant on adherence. Increasing the uptake of LARC methods will reduce the number of unintended pregnancies generally. The most recent NICE guidance on LARC provides detailed evidence of effectiveness for individual methods. All currently available LARC methods (Intrauterine devices (IUDs), Intrauterine systems (IUS), injectable contraceptives and implants) are more cost effective than the combined oral contraceptive pill even at 1 year of use whilst IUDs the IUS and implants are more cost effective than the injectable contraceptives.³¹

[NICE Clinical Guidance 30](#)³² outlines a range of recommendations for the provision of LARC including the provision of detailed verbal and written information for women to make informed choices about the method they use and how to use it effectively. This information should be relevant to the needs of the individual and, in relation to young women, should be in accordance with child protection issues.

Interventions to increase use of contraception

A recent review examined the effectiveness of a range of interventions to increase contraceptive use. These interventions included: discussion and demonstration of condoms, computer based contraceptive decision aids and nurse led interactive individual session.²¹

The review concluded there is strong evidence from four good quality studies from North America that interventions which include discussion and demonstration of condom use are effective in increasing engagement in services and condom use. The findings are consistent with a Scottish study of a 'condom club' provided by a GUM service. The intervention included the provision of one to one information and sexual health advice, demonstration of condom use and free condoms at satellite clinics. Attendance of young people at these clinics was higher compared with the clinics across the rest of Scotland, particularly where sites offered daily access and was located close to a school. The quality of the study was not as strong as the American studies.²¹

The authors also suggest there is strong evidence, from three good quality studies, that additional interventions to promote hormonal contraception services use may be

effective in improving adolescent knowledge about and use of contraception. However, effectiveness may vary depending on the type of intervention and population. Promising interventions included: a computer based contraception decision aid which improved knowledge about contraception amongst the 'white' study sample but not the African-American sample, and; a transactional one-one intervention with a nurse about oral contraception which increased adherence to use.²¹

[NICE Public Health Guidance 51](#)⁶ recommends that young people are advised to use condoms correctly and consistently alongside other contraception. The recommendations include the provision of accessible free condoms (including female condoms); information and advice about and preferably demonstration of correct use of condom and; provision of information about emergency contraception and other contraceptive services including when, how and where to access them.

Emergency Contraception

A recent review considered the effectiveness of interventions in community settings to increase use of contraceptives or contraception services. It found reasonable evidence from one good quality study that a computer assisted emergency hormonal contraceptive (EHC) programme (including education and the provision of EHC) in urgent care clinic in the USA was effective in increasing knowledge and use of EHC, and reducing pregnancy rates.²⁵

[NICE Public Health Guidance 51](#)⁶ recommends the provision of EC and highlights the need for easy and timely access to free EC as well as actions which ensure young people: know where to obtain free EC; have accurate information about the types of EC offered as well as information to inform future choices about contraception and where to access them. The guidance recommends that referral pathways are in place to enable access to local contraceptive services or confidential pregnancy tests and that all professionals providing oral EC are aware of relevant issues of consent, duty of care and confidentiality in relation to young people under 16.

Services based or linked to schools and colleges

The provision of health centres based in or linked to schools or colleges is one model of youth-friendly health services and allows services to be more accessible to young people (see strand 2).

School Based Health Centres (SBHC) and School Linked Health Centres (SLHC)

A recent systematic review examined the effectiveness of school based and school linked health centres in terms of their impact on sexual risk behaviour³. Whilst the evidence is drawn largely from a relatively small number of reasonable quality studies from the USA, the review concluded that there is evidence from four reasonable quality studies that SBSHS and SLSHS may be associated with a reduction in sexual risk behaviour in terms of a reduction in the numbers of students reporting recent sexual activity and high numbers of sexual partners. In addition there is moderate evidence from seven reasonable quality studies that SBSHS or

SLSHS *are not* associated with an increase in sexual activity or, on the basis of one study, lowering the age of sexual initiation. There is no good quality evidence that they are associated with an increase in contraceptive use. A review by Kirby¹⁴ suggest there is weak evidence from one poorer quality study that SBSHS and SLSHS may be associated with a reduction in live births to teenage mothers.

A review of school based clinics concluded that there is strong evidence from 4 studies of mixed quality that on-site dispensing of contraceptives from school based clinics can be effective in increasing contraceptive provision. However it is unclear from the available evidence whether these programmes are associated with an increase in contraceptive use or longer term outcomes.^{3,22}

A review of interventions in educational setting concluded that there is moderate evidence from two studies of reasonable quality in the USA that interventions for college students including brief motivational interviewing interventions and experiential workshops can be effective in increasing use of contraception in the short term.²²

Reviews of the views of young people from the USA and the UK about accessing school based services suggest that both personal and serviced based factors influence their decision.^{3, 24}

Personal factors include: awareness and need for service; anxiety about treatment and fear of disclosure; privacy in relation to disclosure, parental consent and trust; and, staff attitudes, gender, relationship with student and trust.

Service based factors include: locations in terms of accessibility and visibility; flexibility, cost, the physical environment and alternative provision.

It is plausible that addressing these factors will improve access to and use of sexual health products and services. There is some review level evidence to suggest that services which are holistic rather than specific to sexual health are preferred by young people and practitioners and may address issues of stigmas and increase access to services³

Based on the best available evidence Owen suggests a number of principles that should inform school based service development and evaluation.³

- Robust procedures across agencies to safeguard confidentially.
- Engagement with users and young people in the design and implementation of monitoring and evaluation process.
- Consultation with school staff and parents to secure informed leadership and support.
- Close liaison and joint work with staff teaching Relationship, Sexual Health and Parenthood (RSHP).
- Design of locations and sessions times to protect privacy.
- Multi-professional staff teams including male and female members.
- Incorporation of local and national child protection guidelines and liaison with relevant local agencies.

- Provision of comprehensive sexual health services including relationship advice, prescriptions for oral and emergency contraception, other forms of contraception, STI screening and pregnancy testing, signposting and referrals for specialised services off site.
- Access to continuing professional development for staff.
- Marketing services as broad based rather than solely sexual health.
- Secure funding basis.

[NICE Public Health Guidance 51](#)⁶ recommends the provision of school and educational based contraceptive services in or near educational settings which are informed, implemented, promoted and reviewed with the involvement of young people. Some of the key aspects of these services include: appropriate confidentiality; the provision of accurate and up to date information, advice and support; availability of free and confidential pregnancy testing and the full range of contraceptive methods; and, quick and easy referral to local services outside of the educational setting. Provision for continuity of services and a non-judgemental and respectful workforce, able to support young people make personal and appropriate choice about contraception, is also recommended.

Community based interventions

A recent review examined the effectiveness of community based intervention in promoting positive sexual behaviour and reducing unintended pregnancy. This included a comprehensive and intensive community based project, community based interventions for men and arts based programmes.²⁵

There is mixed evidence about the effectiveness of intensive community based projects including reproductive and sexual health service provision. Evidence from a good quality study of the Carrera Model Programme found the programme was effective in delaying initiation of sexual intercourse, increasing condom use and reduced pregnancy rates amongst girls. The programme also had a positive impact for both females and males on health service use and academic achievement. An adaptation of the Carrera project, the Young People's Youth Development programme (YPYDY), was implemented in the UK. This programme targeted young people considered at risk of teenage conception, substance misuse or exclusion from school. The evaluation found a number of negative impacts in terms of an increase in early sexual experience and expectations of teenage parenthood among young women and more reported pregnancies at 18 month follow up. However this programme had significant limitations including poor programme fidelity, a weaker study design than the original and group differences at baseline. The study authors suggested these limitations may at least partly account for the findings. Further, more rigorous research is needed in the UK context.²⁵

A limited body of research was identified evaluating community based programmes specifically for men. The review concluded there was moderate evidence from two reasonable quality studies that interventions specifically for men may have a positive impact on knowledge and attitudes and number of sexual partners but not on increasing levels of contraceptive use. One good quality study found that a community based educational intervention was associated with increasing

knowledge about sexual and reproductive health, improving attitudes to condom use and reducing number of sexual partners in the short term but had no impact on condom use. A second reasonable quality study of a parenting programme (which included both group session and individual social work sessions) found no impact on improving levels of contraceptive use. However this programme did find positive effects in terms of employment, vocational planning, and social outcomes.²⁵

The review found a limited body of research from the USA about the effectiveness of arts based intervention. The review concluded that there is moderate evidence from two poor quality studies that entertainment and theatre based interventions may increase knowledge about contraception amongst ethnic minority populations in the immediate short term. There was weak evidence from two poorer quality studies that social marketing approaches to emergency contraception and condom use may be effective in increasing knowledge, attitudes and use of contraception and emergency contraception.²⁵ [DN: consider Wakhisis 2011 for inclusion]

Whilst improved knowledge and attitudes are important pre-requisites of behaviour change they are unlikely to be sufficient to change behaviour. NICE Public Health [Guidance 6](#)³³ on behaviour change and the principles for effective intervention, provides a review of the evidence and recommendation about behaviour change.

General characteristics

A recent review of reviews suggests that a number of intervention characteristics across settings appear to contribute to effectiveness. These include: being theoretically-based; providing clear information through unambiguous messages; using behaviour skills training, including self-efficacy; being tailored and targeted and being based on needs assessment and formative research.¹⁰

NOTE: Further evidence on community based interventions to prevent repeated pregnancy are referred to in strand 4 and action to address some of the determinants of unintended pregnancy are referred to in stand 3.

Summary

- Review level evidence from qualitative research indicates that young people have gaps in their knowledge about sexual activity, contraception, including emergency contraception (EC), and where to access contraception.
- Review level evidence suggests that outreach services may increase access and maintained contact with sexual health service though the extent to which this impacts on sexual health behaviour and pregnancy is unclear.
- There is inconsistent evidence about the effectiveness of comprehensive multicomponent programmes. Some evidence suggests they may be effective in reducing pregnancy but that the provision of LARC was the most important factor.
- Review level evidence suggest that interventions that include discussion and demonstration of condoms are effective in engaging young people in services and increasing use of condoms and, that some interventions that use additional services to increase contraceptive use may be effective.

- There is strong evidence that Long Acting Reversible Contraception (LARC) is the most effective and cost-effective form of contraception. NICE guidance outlines a range of recommendations for the provision of LARC.
- Systematic reviews suggest there is reasonable evidence that school-based or school-linked health services may contribute to reduced levels of sexual activity and delay sexual initiation and are not associated with increased sexual activity. However there is a relatively small body of high quality research. There is good evidence that on-site dispensing of condoms is associated with greater provision of condoms though impact on use has not been fully evaluated.
- There is good evidence to suggest that a range of personal and service based factors influence access and use of school based/linked services by young people. Based on the available evidence key characteristics have been proposed to inform service development and evaluations.
- There is promising evidence that Carrera, an intensive community based youth development programme may be effective in reducing pregnancy and improving sexual behaviour. A UK adaptation of this model reported negative impacts though these may be explained by the weak study design and poor implementation fidelity.

HIAA note:

The evidence includes programmes targeted at young people are social disadvantaged or socially excluded.

Activity: Supporting young women to make informed choices around conception

Link 2.4

Early identification, support and advice for young women who have conceived will enable them to make earlier informed decisions. This will contribute to earlier access to appropriate services and, where appropriate, increased uptake of contraception including LARC. This will contribute to improved health and social outcomes for young women and where appropriate their offspring.

Informed choices around conception are: continuation of the pregnancy with a view to keeping the child, continuation of the pregnancy with a view to adoption, or abortion.

Evidence/plausible theory

Statistical data suggest that pregnant young women are less likely to access services early in pregnancy.⁷ This is consistent with recent data from Scotland.³⁴ Delayed access to antenatal services is associated with poorer health outcomes for mothers and their offspring⁷ and in relation to abortion services can result in reduced choices for young women.

It is plausible that early recognition of pregnancy by professionals (for example from health, education and youth work) and the provision of information about, and early support for, continued pregnancy, abortion or adoption will enable more young women and their partners to make timely and informed choices about the progression of their pregnancy. This will contribute to a reduction in the number of young women presenting later to abortion and antenatal services.

No highly processed evidence was identified about how best to support professionals to recognise early teenage pregnancy or how to best to support young people make informed choices following conception.

[DN: Consider inclusion of A Matter of Choice JRT]

Access to ante-natal services

A review of UK-based qualitative research identified a large number of potential service based and personal barriers for young women accessing services. These included both personal reasons (e.g. not wanting to recognise pregnancy, embarrassment of unplanned pregnancy, being afraid of telling parents and having social problems that are more important to focus on than health care) and service barriers (e.g. treatment/attitude of staff, waiting times, transportation and age discrepancy with other service users).⁷

A recent evidence review considered the effectiveness of a range of approaches to improving access to antenatal care. These included specialist services for young women; school-based versus hospital based comprehensive antenatal programmes; community based versus standard care and community based (with lay home visiting') versus multidisciplinary hospital-based care. However the most effective means of increasing access to antenatal services is unclear.⁷

There is promising evidence, from two studies, that a specialist service for young women which emphasises the early initiation of care and a multifaceted community based service, including home visits by trained lay advocates will result in early booking. There is, however, no evidence to suggest any significant benefit in relation to booking gestation and it is not clear which components are critical for improving access. The evidence is of poor quality and largely conducted in the US.⁷

Other promising interventions for socially disadvantaged and vulnerable women include mobile clinics offering walk-in appointments, link workers and culturally appropriate community based programmes. However no robust evidence has been identified and there is a need for further investigation of these approaches in the UK.³⁵

Whilst the evidence is generally small, of poor quality and largely from studies conducted in the US, [NICE Clinical Guidance 110](#) makes a number of recommendations specifically in relation to young women under 20 who are pregnant. These include:

- *Care provision:* Encouraging access to antenatal care through provision of age appropriate services, recognition that young women may be dealing with a range of social problems, help and information about transportation to and from

services, community based services and opportunities for partner/father involvement in antenatal care with her agreement.

- *Service organisation:* Partnership working to improve access and contact with anti-natal services, considering establishing specialist antenatal for pregnant teenagers using flexible models of care tailored to the needs of the local population. Whilst not recommending a particular model, they note that continuity of care for teenagers is beneficial to their continued attendance and suggest care is provided by the same health professional.
- *Information and support:* age appropriate information in a range of formats about ante-natal services and other relevant services and benefits.
- Training for healthcare staff.

NICE suggest audits of existing services and new services will contribute to further development of the evidence.

Access to Long Acting Reversible Contraception (LARC)

There is strong evidence that Long Acting Reversible Contraception (LARC) is more effective than other forms of contraception, as it is less reliant on adherence and is more cost effective than the combined oral contraceptive pill even at 1 year of use; and, that intra-uterine devices (IUDs), the intrauterine systems (IUS) and implants are more cost effective than injectable contraceptives.³¹ Increasing the uptake of LARC methods will therefore reduce the number of unintended pregnancies.

[NICE Clinical Guidance 30](#)³² outlines a range of recommendations for the provision of LARC including the provision of detailed verbal and written information for women to make informed choices about the method they use and how to use it effectively. This information should be relevant to the needs of the individual and, in relation to young women, should be in accordance with child protection issues.

[NICE Public Health Guidance 51](#)⁶ provides recommendations about the provision of contraceptive services for young people in abortion services.

[CEL 01 \(2012\): Health Promoting Health Service: Action in Hospital Setting](#) provides targets for the provision of contraception, including LARC, to all women, in particular vulnerable women at risk of poor sexual health outcome, prior to discharge from abortion services.³⁶

Summary

- There is evidence to suggest that pregnant young women are less likely to access services early in pregnancy. Late engagement with services is associated with poorer health outcomes for mothers and their offspring and in relation to abortion services can result in reduced choices for young women.
- No highly processed evidence was identified about effective ways of supporting young people to make early informed choices following conception.
- There is good evidence that young women experience a large number of personal and service barriers to accessing antenatal care. There is promising evidence that specialist service which emphasise early initiation of care and

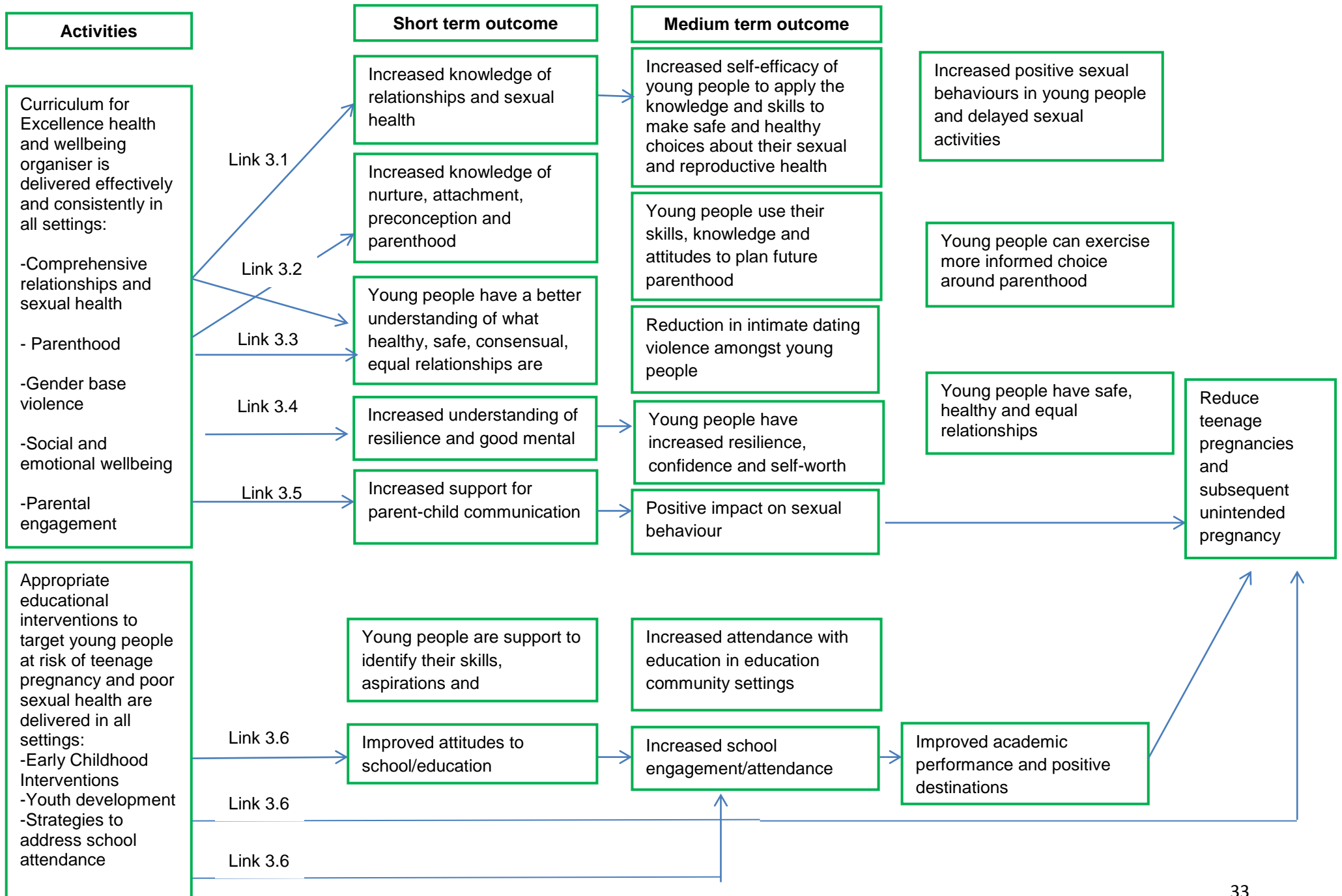
multifaceted community based service, including home visits by trained lay advocates increased early booking.

- There is strong evidence that Long Acting Reversible Contraception (LARC) is the most effective and cost-effective form of contraception. NICE PHG 51 includes guidance about the provision of advice and effective contraception in abortion services for young people and CEL 01 (2012) recommends targets for the provision of advice about effective contraceptive advice (including LARC), for women, particularly vulnerable women prior to discharge from abortion services in Scotland.

HIIA Note:

The evidence includes the views of and programmes targeting young people who are social disadvantaged or socially excluded.

Strand 3: Education and positive destinations



Strand 3: Education and positive destinations

Introduction

This section should be read in conjunction with the 'Education and positive destinations' nested model of the Teenage Pregnancy Outcomes Framework. This nested model has two components:

Firstly for young people to have healthy, safe, consensual, equal relationships, they need effective, evidence informed health and wellbeing education from a young age. Educational interventions to prevent unintended pregnancy should be wide ranging and include sex and relationship education encompassing promoting a good understanding of parenthood, nurturing and attachment; support for social and emotional wellbeing; and, the promotion of prosocial behaviour and the reduction of violence including gender based violence and stereotyping. Interventions should be available across all settings and should involve parents (links 3.1 - 3.5).

Secondly, poor attainment and school engagement are risk factors for early unintended pregnancy. Education in all setting should encourage increased educational attainment and connectedness with schools and support young people to develop their aspirations and skills for the future (link 3.6).

Activity: Comprehensive relationships and sexual health education in all settings is delivered effectively and consistently as part of the RSHP organiser of the Health and wellbeing curriculum area for Excellence

Link 3.1

Providing children and young people with sex and relationship education (SRE) in all settings will contribute to improved knowledge attitudes and skills to engage in equitable, safe and consensual relations which in turn will contribute to positive sexual behaviour. This will ultimately contribute to a reduction in teenage pregnancy and unintended pregnancies.

Evidence/plausible theory for action

Comprehensive SRE

The evidence is drawn from evaluations of a range of SRE programmes which cover a wide range of issues including information on contraception and safer sex practices and delay in addition to abstinence. Many also provide accurate information about and access to contraception/sexual health service.

Much of the evidence about SRE in schools is based on evaluations of programmes implemented for those in secondary school and there is limited highly processed evidence about the effectiveness of curriculum based SRE programmes delivered in primary education.³⁷

There is good evidence from reviews and meta-analysis of a large number of studies to suggest that comprehensive SRE delivered in schools, community settings and health clinics (or in multiple settings) can contribute to reductions in sexual risk behaviour. This includes: delaying when young people choose to have sex for the first time; reducing how often they have sex; and, increasing the likelihood of having protected sex (in particular using a condom). These programmes can also contribute to improved knowledge, attitudes and skills in relation to sexual health. There is no evidence that comprehensive sex and relationship programmes increases risky sexual behaviour.^{13, 14, 38, 39} Few studies have examined the impact on pregnancy and a small number have found a positive impact.^{39,40} Whilst much of the evidence is based on research from the USA, where the cultural and educational context is different to the UK, it does include a small body of good quality evaluations of UK comprehensive SRE programmes.

A review of interventions aimed at reducing unintended pregnancy suggest there is reasonable evidence from a smaller number of studies that *multicomponent interventions* which include education, skills building and promotion of contraception can reduce rates of unintended pregnancy.⁴⁰

Programmes are wide ranging and vary in terms of the outcomes they influence and the size of impact. Whilst it is not clear which programme characteristics influence effectiveness there is reasonable evidence from a number of systematic reviews to suggest that comprehensive programmes are more likely to be effective if they have¹³:

- a theoretical basis
- are delivered by trained health educators and,
- provide specific content focusing on sexual risk reduction

A review of common characteristics of effectiveness programmes concluded that 17 characteristics are associated with more effective programmes.¹⁴ These characteristics cover:

- how programme curricula are developed
- the content of the curriculum (goals and objectives; teaching methods)
- the implementation of programmes.

Community based interventions

A review of review of community based interventions concluded that there is strong evidence from five systematic reviews and 1 meta-analysis that interventions and programmes delivered in a range of community settings can have a positive impact on sexual risk behaviours, in particular condom use, and pregnancy.³⁰ The findings from one of these reviews suggest effective components of community based interventions are similar to those of programmes more generally:

- theoretically based;
- tailored to the target population,
- implemented by trained facilitators;
- based on diverse content; and
- delivered using a wide variety of methods

This review also suggest there is moderate evidence from a small body of quality research that group based education and/or skills-based programmes delivered in a community setting can have an impact on knowledge and understanding of and attitudes about sexual health and may have a positive impact on sexual behaviour, in particular condom use, in the short term.³⁰

Peer-led interventions

A number of reviews have examining the effectiveness of peer education programmes. Whilst they have found promising results from single studies the quality of studies and mixed findings makes it difficult to draw clear conclusions about the effectiveness of these programmes. The reviews suggest that many peer-led programmes were not well implemented and this may explain the findings. They suggest that peer education programmes should be informed by peer education guidance such as that published by the EU.^{13, 41,42}

Abstinence programmes

Abstinence-only programmes promote sexual abstinence as the only means to avoid adverse sexual health outcomes. They do not promote safer sex strategies or information on contraception. Most, if not all, abstinence-only programmes include a message of delay until marriage.

A number of recent systematic reviews and a meta-analysis of US abstinence based programmes suggest that the evidence is inconclusive about their effectiveness in reducing sexual activity. They note that there is a smaller body of high quality evidence about the effectiveness of abstinence programmes and that the better quality studies suggest these programmes have no effect on frequency of sexual activity. The available evidence also indicates that, as expected, these programmes have no impact on reducing the number of sex partners or unprotected sex or, increase condom and hormonal contraceptive use.^{13,14,38}

Whole school and multiple setting interventions

There is review level evidence, from three reasonable quality studies, that curriculum based general health education programmes with an intensive community based components delivered in secondary school (such as the Aban Aya and Reach for Health programmes) may have a positive impact on preventing sexual risk behaviour. The extent to which general health education curriculum based programmes impact on sexual health knowledge and attitudes is unclear as only two studies of mixed quality examined these outcomes.^{13,14,43}

A recent environmental scan⁴³ found promising evidence from one good quality study that a whole school intervention (the Gatehouse project) *may* have an impact on sexual risk behaviour in the longer term. This programme focused on building a sense of security and trust, enhancing communication and social connectedness and building a sense of positive regard through participation in aspects of school life, The

initial evaluation at three year follow up found no effect on sexual health behaviour however a further evaluation, 4 years post intervention (one year after the intervention had ended), found a significant reduction in early initiation of sex and marked risky behaviour (a composite variable of substance use, antisocial behaviour and sexual intercourse). This evidence suggests that it may take some years for changes in the school approach to become established and impact on risk behaviour.

Summary

- SRE has an important role to play in contributing to positive sexual behaviour in young people however this needs to be part of the broader approach which includes parenthood, gender based violence, social and emotional wellbeing and engagement of parents.
- There is review level evidence that comprehensive sex and relationships (SRE) programmes delivered in a range of settings are effective in contributing to increased knowledge, attitudes and skills in relation to sexual health, a reduction in sexual risk behaviour and an increase in positive sexual behaviour. There is no evidence that they increase risky sexual behaviour. Few studies have examined the impact of pregnancy and a small number of studies have found a positive impact.
- There is review level evidence that programmes that are multimodal and incorporate education, skills building and condom promotion may have a positive impact on rates of unintended pregnancy.
- There is review level evidence that comprehensive programmes are more likely to be successful if they have a theoretical basis, are delivered by trained professionals and provide specific content focusing on sexual risk reduction. The available evidence points to a number of common characteristics that are associated with the effectiveness of interventions in terms of the *development*, *content* and *delivery* of SRE programmes.
- There is review level evidence to suggest that effectiveness of abstinence based programmes is inconclusive and is based on a smaller number of high quality evidence. Better quality studies suggest these programmes are not effective in reducing sexual activity.
- There is review level evidence that general health education programmes which involve a community component are effective in reducing sexual risk behaviour. Weak evidence from one study suggests that whole school approach *may* have an impact on sexual behaviour in the long term.

Activity: Parenthood programmes are effectively and consistently delivered as part of the Relationships, Sexual Health and Parenthood (RSHP) organiser of the Health and Wellbeing curriculum area for Curriculum for Excellence.

Link 3.2

Providing effective parenthood programmes will equip young people with a good understanding of parenthood from preconception through to parenting. This will

contribute to young people making informed choices about parenthood which may delay pregnancy and contribute to improved health and social outcomes for children and their parents.

Evidence/plausible theory

No highly processed evidence was identified. However it is plausible that education about future parenthood will empower young people to make more informed choices about whether and when they would wish to become a parent in the future. This is particularly important for young people who have not been parented themselves.

Activity: Programmes to address gender based violence and stereotyping are effectively and consistently delivered as part of the Relationships, Sexual Health and Parenthood (RSHP) organiser of the Health and Wellbeing curriculum area for Curriculum for Excellence.

Link 3.3

Programmes to address gender based violence will enable young people to develop their knowledge, understanding and skills about healthy, safe, consensual and equal relations. This will contribute to reductions in gender stereotyping and dating violence which will in turn contribute to the development of safe, healthy and equal relationships. This will ultimately contribute to a reduction in unintended pregnancy.

Evidence/plausible theory

Primary prevention

Overall, there is limited highly processed evidence about primary prevention programmes for relationship violence and abuse for young people.⁴⁴

Of particular relevance is a Scottish study, of moderate quality, which evaluated the *Respect* programme and reported mixed results. Improvements were noted in knowledge of respect, communication, equality and power. However, attitudes to gender stereotyping and perceptions of violence, including sexual violence, against women and harassment showed less improvement.⁴⁵

There is promising evidence from programmes from North America. The US programme *Safe Dates* is a universal adolescent dating violence prevention programme aimed at 11-18 year olds. An RCT showed reductions in physical and sexual dating violence at 4 year follow up⁴⁶. *Forth R: Skills for youth relationships programme* is a Canadian curriculum focused programme including information for parents and a student-led schools committee aimed at addressing personal safety and injury prevention, healthy growth and sexuality and substance use through promoting healthy, non-violent relationship skills. An RCT study found levels of physical dating violence were approximately 2.5 times greater amongst boys in the control group compared with the intervention group and an increase in condom use

was found amongst males, but not females, compared with controls at 30 months follow up.⁴³

Whilst some primary prevention approaches are promising, there is not currently sufficient evidence to recommend any particular adolescent dating violence prevention programme over another.

[DN: Recent evaluation being considered]

Secondary prevention

There is moderate evidence that secondary prevention programmes targeted at young people designated as high risk of domestic violence and abuse can improve knowledge, attitudes towards violence and gender roles and, interpersonal outcomes. However, there is no evidence that either primary or secondary prevention interventions lead to a lasting change in perpetrator violence. Findings from some studies are equivocal and in others behavioural change has not been included as an indicator of outcome within evaluations.⁴⁵

Summary

- Limited highly processed evidence was identified for the effectiveness of programmes to address gender based inequalities and violence. Whilst some primary prevention approaches are promising, there is not currently sufficient evidence to recommend any particular adolescent dating violence prevention programme over another

Activities: Universal and targeted programmes to address social and emotional wellbeing is delivered effectively and consistently in all settings as part of the Mental, Emotional, Social and Physical Wellbeing organiser of the Health and Wellbeing curriculum area of Curriculum for Excellence.

Link 3.4

Activities to improve social and emotional wellbeing contribute to improvements in: aspects of psychological wellbeing (self-efficacy, locus of control), confidence (self-concept, self-esteem) emotional wellbeing (anxiety stress and depression, coping skills) and social wellbeing (good relations with others, emotional literacy, antisocial and pro-social behaviour, social skills). This in turn will contribute to young people developing safe, healthy and equal relationships which in turn will contribute to increased positive sexual behaviour.

Evidence/plausible theory

NICE have developed public health guidance about how social and emotional wellbeing should be delivered in primary and secondary education. The application of this guidance in the Scottish Context can be found in the [NHS Health Scotland Commentaries on NICE Public Health Guidance 12](#)⁴⁷ and the [NHS Health Scotland](#)

[Scottish Perspective on NICE Public Health Guidance 20](#).¹⁵ Further information can also be found in [Outcomes Framework for Scotland's Mental Health](#).⁴⁸

Summary

- The evidence base and recommendation for interventions to address the social and emotional wellbeing of children and young people in schools have been developed by NICE. Further details can also be found in the Outcomes Framework for Scotland's Mental Health.

Activity: Parents are involved in SRE in all settings

Link 3.5

The involvement of parents in SRE in all settings will contribute to positive changes in parent-child relationships and parental monitoring of behaviour, communication of values around sexual relations and modelling of appropriate sexual behaviour. This in turn will contribute to a reduction in sexual risk behaviour and ultimately contribute to a reduction in unintended teenage pregnancy.

Evidence/plausible theory

Evidence suggests that aspects of family structure; family connectedness; parental monitoring; and, parental attitudes and values about sex are associated with sexual behaviour amongst adolescents.⁴⁹

A recent review of parental involvement in SRE suggest there is good evidence that school, home and community based programmes involving a parenting component can have a positive impact on young people's knowledge and and/or attitudes and improved parent-child communication. However the extent to which these programmes contribute to positive sexual behaviour is unclear due to the limited number of studies looking at behaviour outcomes.⁴⁹

A review of programmes involving a parental component suggest there is promising evidence, based on 5 studies, that community based programmes with a significant parenting component (more than 25% of the programme) had a positive impact on sexual behaviour. There is also promising evidence from two studies that programme addressing multiple risk behaviours (FOK + ImPACT and Family Unidas + PATH) may contribute to improved sexual health behaviour. However evidence of impact was mixed with positive impacts on some behaviours and no impacts on other sexual health behaviours. These programmes also found some effects in terms of improved parent/family-child communication.³⁰

The available evidence suggests that sexual health programmes that are more intensive and promote parental monitoring or regulation and help parents to model the behaviour they want their children to follow may be the most promising.^{14,30,49}

The potential to develop parent-child attachment may also be achieved through early childhood interventions.

Summary

- Evidence suggest that family structure and connectedness, parental monitoring and parental attitudes and values about sex are associated with sexual behaviour amongst adolescents
- There is a limited body of highly processed evidence about the effectiveness of programmes including a parenting component in reducing risky sexual behaviour. Programmes that are intensive and focus on parental monitoring or regulation are the most promising in terms of reducing sexual risk behaviour.
- There is reasonable evidence to suggest that intensive programmes have a positive impact on child-parent interactions.

Activities: Actions to promote school engagement and school achievement and promote greater aspirations for children and young people across the life course.

Link 3.6

Appropriate educational interventions targeted at young people at risk of teenage pregnancy and poor sexual health will contribute to improved school attainment and engagement. This will contribute to improved outcomes for young people in terms of their experience of school, aspirations, social and emotional wellbeing, educational engagement and attainment. This will ultimately contribute to an increased likelihood of remaining in education or gaining training opportunities or employment as well as a reduction in unintended pregnancy.

Evidence/plausible theory

Statistical data suggest that social deprivation and poor school engagement and attainment are associated with increased risk of teenage pregnancy^{10,pers comms}. [DN: awaiting confirmation for citation] Evidence from UK qualitative research also suggests that young people identify negative experiences of school, expectations and aspirations about the future and poor material circumstance and unhappy childhood as relevant to becoming pregnant as a teenager.⁵

Early childhood Interventions

There is good evidence, from a small number of good quality long term evaluations, that intensive and targeted childhood interventions delivered in infancy (such as the Abecedarian Project) and pre-school (such as the High/Scope Perry Project) can

have a positive impact on reducing teenage pregnancy. This impact was stronger for women than men (partners become pregnant). These interventions were delivered in the USA.^{5,51}

The evidence suggest that these programs can also have a positive impact on school achievement as well as longer term impacts in terms of increased life success, reduced levels of delinquency and crime prevention. Greatest effects were seen in those at highest social risk. Academic achievement differences persist, leading to better outcomes in adult life. Combining centre- and home-based programmes focusing on both children and parents, appear to be effective.

There is strong evidence from 3 good quality randomised trials in the USA that the Family Nurse Partnership programme can have a positive impact on a range of child and parent outcomes. The offspring of low socioeconomic, unmarried mothers who received the intervention reported significantly fewer sexual partners in the past six months than the control group however there was no difference in the initiation of sexual intercourse. These studies indicate that the programme can have other long terms positive effects including fewer arrests, convictions and violations of probations than the control group.^{51,52}

Late Childhood

Evidence from two good quality trials suggests that the Seattle Social Development Project had a positive impact on sexual health behaviour and reduced rates of pregnancy in the long term. There is evidence that the full five year intervention (beginning at age 5) had a greater impact than the later intervention delivered for 2 years from age 9 which had a greater impact than no intervention.^{5,37}

There is evidence from 5 generally good quality studies that Social Development Projects (including the SSDP, the Child Development Project and Positive Action Programmes) which combine school and family based components, and are targeted at socially disadvantaged children during later childhood, can positively impact on attachment to school, academic performance and social skills (family connectedness).^{5,37}

Youth Development Programmes

There is evidence from 2 good quality studies that youth development programmes which include a study or learning component and voluntary service in the community (Teen Outreach programme; Carrera) can have positive impact on pregnancy rates of young women. However these programmes did not appear to be as effective for young men. The effectiveness of Teen Outreach Programme seemed to be influenced by whether young people had some control over where they volunteered. A further good quality study of an intensive and comprehensive youth development programme (Quantum Opportunities) found a reduction in birth rate amongst those attending the programme however this reduction did not reach significance. There is evidence that these programmes also had a positive impact on academic achievement.^{5,14}

Most of the studies were undertaken in the USA therefore there is a need to replicate in Scotland to assess transferability. However the programmes address a number of the issues raised young people in the UK in relation to teenage pregnancy particularly in terms of improving school enjoyment, raising expectations and ambitions for future and ameliorating the effect of unhappy childhood in poor material circumstance.

A number of other youth development projects (Learn and Serve; Reach for Health) showed positive impacts in terms of sexual behaviour however these evaluations were not as robust and had a number of limitations.^{5,14}

The Carrera project, a youth development project including a sexual health component. It had a positive impact on sexual activity, contraceptive use and pregnancy rates amongst girls at a number of sites. However impacts on sexual behaviour were not replicated in all sites in the USA. An adaptation of the Carrera project was implemented in the UK as the *Young People's Youth Development programme (YPYDY)*. This programme targeted young people considered at risk of teenage conception, substance misuse or exclusion from school however was not implemented with fidelity. The evaluation of the programme found a number of negative impacts in terms of an increase in early sexual experience and expectations of teenage parenthood amongst young women and more reported pregnancies at 18 month follow up. In addition to poor programme fidelity, the study design had a number of limitations (including group differences at baseline) which the authors suggested may at least partly account for the findings. Further, more rigorous research is needed in the UK context.³⁰

[DN: Insert findings of recent review of youth work]

In their work combing the evidence on young people views about factors relevant to teenage pregnancy and effective interventions, Harden and colleagues proposes a range of implications for interventions⁵. Some of these are addressed in actions proposed to promote emotional and social wellbeing.

- Improving young people's experiences of school
 - Involving young people in decision making within a whole school approach.
 - Providing support for young people starting new schools.
 - Equipping young people with skills to form positive relationships.
 - Equipping young people with skills to resolve conflicts.
 - Introducing anti-bullying strategies.
 - Training for secondary school teachers in conflict resolution etc.
 - Providing learning support interventions.
 - Fostering greater parental involvement during secondary school.
- Broaden young peoples' expectations/aspirations for the future
 - Improve work experience opportunities.
 - Protect against bad experiences of work.
 - Ensure young people are involved in their career development.
 - Provide out of school activities to improve self-esteem and positive outcomes.
 - Create more employment opportunities in disadvantaged communities.
 - Raise awareness of opportunities.

Programmes to increase school attendance

There is review level evidence, based on a meta-analysis of over a hundred studies, that a wide range of prevention and intervention programmes in primary and secondary schools are effective in reducing dropout rates amongst those with poor performance or poor attendance. Interventions were delivered in a variety of settings including school, afterschool or a community setting or multiple settings, were high intensity and delivered on average over 91 weeks. They included: class restructuring, vocational training, supplemental academic services, community services, mentoring or counselling, alternative schools, attendance monitoring and contingencies, college orientated programmes and multi-service package (academic, vocational and case management), skills training including CBT, case management.

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No one intervention was found to be more effective. Older participants tended to show better outcomes and programmes with more frequent contact had a small impact, possibly due to more variability in delivery or receipt of services resulting in smaller but still positive outcomes. There was some evidence that programs in classroom settings or mixed settings were more effective than those in the community, though the latter also had positive effects. As setting is closely associated with type of programme it is not clear whether setting or programme type is the active component.

There is no evidence to suggest that participant characteristics influenced outcome and therefore tailoring programmes to meet the needs of specific population may not be necessary; however there may be cultural or specific reasons for doing this. Good quality implementation emerges as an important factor influencing effectiveness and therefore strategies might usefully be selected in terms of what can be most successfully implemented and fits best within the setting, staff and cost. There was significant variation in effect between studies and within groups of studies and therefore caution is urged in the interpretation of findings.

There is review level evidence, based on a meta-analysis of 16 good quality studies, that a wide range of school-, court- and community-based interventions targeted at young people identified as having problems with school attendance are effective in increasing attendance. The impact of interventions is modest (average 4.64 days) and there is considerable variability across studies. There is no evidence that impact was influenced by intervention type, settings or modality however this may have been due to the relatively small number of studies included. There was no evidence to suggest that collaborative and multimodal interventions were more effective than single component interventions. The evidence base is relatively limited and there is a lack of rigorous research. The available evidence is based on findings from the USA.

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Programmes to increase school attainment

[DN: Overview of highly processed evidence not possible at current time to be added when available]

NOTE: [The Sutton Trust-EEF Teaching and Learning Toolkit](#) is a resource which provides a summary of educational research for teachers and schools on how to use their resources to improve the attainment of disadvantaged pupils. Each topic is summarised in terms of their average impact on attainment, the strength of the evidence supporting them and their cost. The toolkit prioritises systematic reviews and meta-analysis of experimental studies. The Toolkit is a live resource that is updated regularly as findings from high-quality research become available.

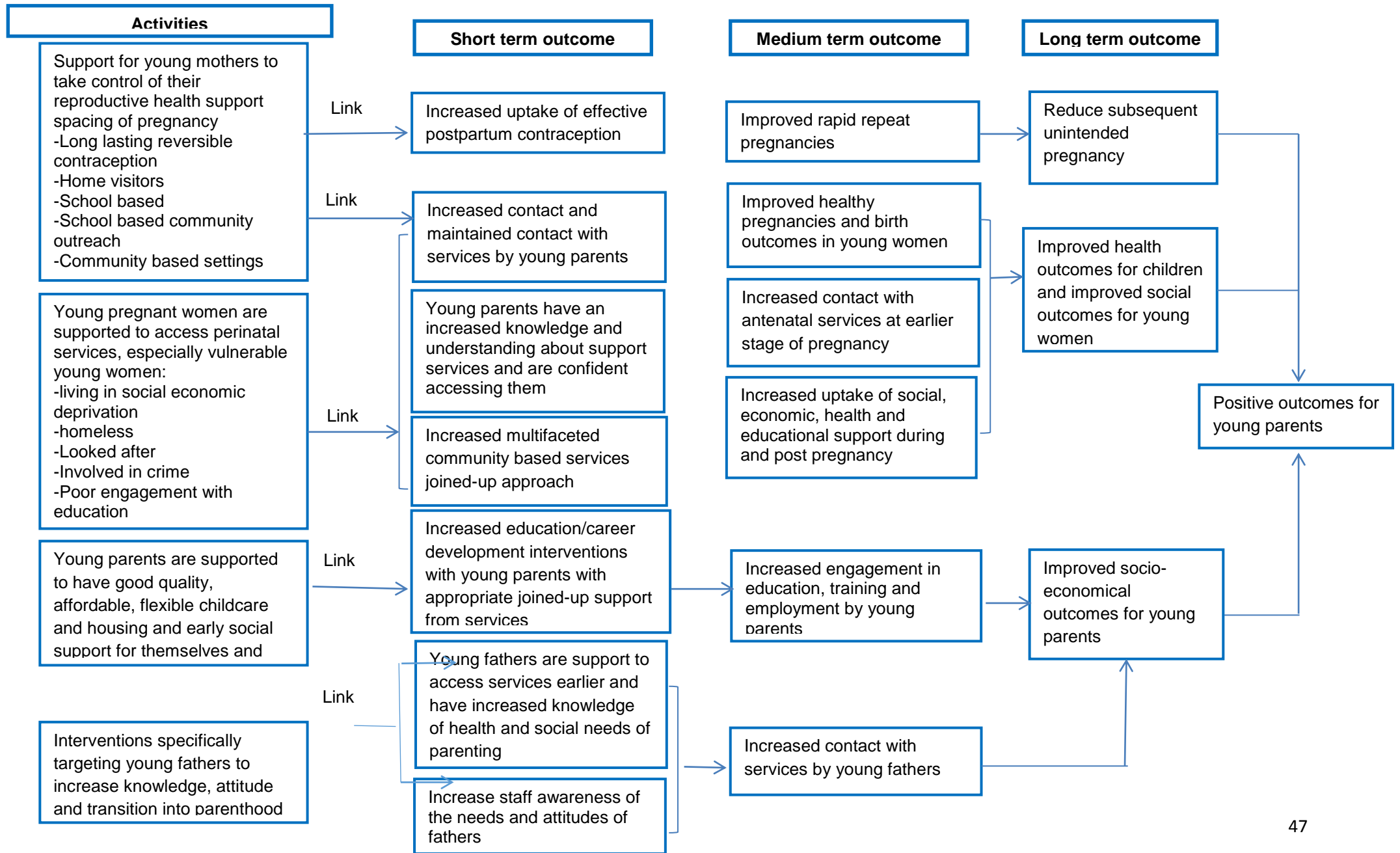
Summary

- There is reasonable evidence that early childhood interventions and social development projects in primary school targeted at those who experience social disadvantage can have a positive impact on pregnancy and/or birth rates, reduced sexual activity or increase safe sexual behaviour and contribute to reducing unintended teenage pregnancy. There is also evidence of positive impacts on academic/school and longer term social outcomes.
- There is reasonable evidence that youth development programmes addressing non-sexual risk factors for unintended teenage pregnancy as well as those incorporating services to address sexual risk factors can have a positive impact on unintended teenage pregnancy. There is also evidence of positive impacts on academic outcomes.
- There is reasonable evidence that a range of school, community and afterschool interventions in primary and secondary schools are effective in reducing school dropout and increasing school attendance and that targeted school-, court- and community-based intervention have a modest impact on school attendance.

HIA Note:

The evidence for early childhood interventions and young development programmes includes programmes targeting children and young people who are socially disadvantaged.

Strand 4: Support for young parents and their children



Rationale for nested model 4: Support for young parents and their children

This section should be read in conjunction with the 'Support for young parents and their children' the nested model of the Teenage Pregnancy Outcomes Framework.

This model contains four elements. Firstly it focuses on helping young women to take control of their reproductive health and increase the spacing of pregnancies. Secondly it focuses on supporting young mothers to access and maintain contact with perinatal services. The third element is about enabling young parents to access good quality support and services to give them the best chance to achieve the best social and health outcomes. Finally it recognises young fathers and the need for targeted interventions to engage them early in services and support their transition to fatherhood.

Action: Support for young mothers to take control of their reproductive health the spacing of pregnancy

Link 4.1

Actions to support for young mothers to take control of their reproductive health will contribute to increased uptake of contraception and reduce sexual risk behaviour. This will increase the spacing of pregnancies thus reducing the population rates of rapid repeat pregnancy. Ultimately this will contribute to a reduction in unintended pregnancy, improved healthy pregnancies and birth outcomes as well as improved health and social outcomes young women and their children.

Evidence/plausible theory

International evidence suggests that adolescents are more likely than older women to have rapid repeat births (within 2 years).⁵⁵ This is consistent with data from Scotland which suggests higher levels of repeat pregnancy (within one and two year) amongst 16-20 year olds compared with older women. Repeat pregnancy is also higher amongst young women in SIMD 1-3 (the most deprived communities) compared with those in SIMD 4 and 5^{pers comms}. [DN: awaiting confirmation for citation]. Rapid repeat pregnancy is associated with an increase in adverse birth outcomes.⁵⁵

Promoting use of effective contraception

The majority of unintended pregnancies results from either not using contraception at the time of conception or inconsistent or incorrect use of contraception.³¹ There is strong evidence that Long Acting Reversible Contraception (LARC) is more effective than other forms of contraception, as it is less reliant on adherence and is more cost effective than the combined oral contraceptive pill even at 1 year of use; and, that intra-uterine devices (IUDs), the intrauterine systems (IUS) and implants are more cost effective than injectable contraceptives.³¹ Increasing the uptake of LARC methods will therefore reduce the number of unintended pregnancies.

[NICE Clinical Guidance 30](#)³² outlines a range of recommendations for the provision of LARC including the provision of detailed verbal and written information for women to make informed choices about the method they use and how to use it effectively. This information should be relevant to the needs of the individual and, in relation to young women, should be in accordance with child protection issues.

[NICE Public Health Guidance 51](#)⁶ provides recommendations about the provision of contraceptive services for young people in maternity services.

CEL 01 (2012): Health Promoting Health Service: Action in Hospital Setting³⁶ provides targets for the provision of contraception, including LARC, to all women, in particular vulnerable women at risk of poor sexual health outcome, prior to discharge from maternity service.

Support for pregnant young women and teenage parents to prevent repeated pregnancy

Community based programmes

There is good evidence from 3 good quality studies from the USA that enhanced home visiting in the form of the Nurse Family Partnership can reduce repeated pregnancy and births and increase the interval between first and second birth.⁵⁶

A recent review considered the effectiveness of a range of community based interventions implemented in the USA and Australia to reduce repeated teenage pregnancy. These included home visitors, generic multicomponent programmes, sibling interventions and incentive peer support programmes.²⁵

- There is mixed evidence from three good quality studies that home visiting is effective in reducing teenage pregnancy. Two studies measured repeat pregnancy rate as an outcome though only one found evidence of a reduction in repeat birth whilst the other found an increase in school continuation. The programmes were both delivered over 1-2 years by culturally matched home visitors and included parenting skills, adolescent development, contraceptive use, and in one, promotion of school continuation. A third study found a significant improvement in contraceptive use amongst young women receiving contraceptive advice through structured home visits from midwives. Repeat pregnancy was not measured in this study.²⁵
- There is reasonable evidence from one good quality study that a generic multicomponent programme *Pathway teen mother support programme* may be effective in reducing repeat pregnancy. The programme targeted low income pregnant and parenting teens and included case management, support groups and family discussions, life skills training and leadership development. Young people received a small financial 'gift' on completion of the programme.²⁵
- There is evidence from one reasonable quality study that an intervention with siblings of pregnant teenagers may be effective in preventing pregnancy and delaying initiation of sex.²⁵

- There is inconsistent evidence from three studies that incentive based peer support programmes are effective in reducing repeat pregnancy. Two studies, one of *Dollar a Day* programme and another of *Sisterhood Agenda*, found that peer support programmes were effective in reducing repeat pregnancy over 5 years. However a better quality study of *Dollar a Day* found no significant reduction in repeated pregnancy.²⁵

School based programmes

A recent review examined the effectiveness of programmes to reduce repeat pregnancy in educational settings²². This included intensive care management programmes and curriculum interventions.

- There is good evidence from two good quality studies and one poorer quality study that a school based intensive care management programmes delivered in the USA provided by culturally matched social workers and targeted at social disadvantaged pregnant or parenting girls was effective in reducing the repeat pregnancy amongst adolescents. The intensive care management was part of a multi-component intervention which included home visiting, peer education and comprehensive medical care for mother and child. The most recent evaluation of this programme found a significant impact on reducing repeat birth but found no impact on overall contraception use. There is weak evidence from one economic evaluation that the intervention is likely to result in net cost savings however little detail was provided about the study.
- There is good evidence from three American studies that curriculum interventions which include a community component (such as Teen Outreach and Reach for Health) can be effective in preventing teen pregnancy and risky sexual behaviour (as well as improving educational outcomes – see strand 3). Two good quality studies of Teen Outreach found the intervention was effective in reducing rates of pregnancy, the second of which show that this particularly the case for teenagers who were already parents.²²

Summary

- There is strong evidence that Long Acting Reversible Contraception (LARC) is the most effective and cost-effective form of contraception. NICE provide guidance about the provision of advice and effective contraception in maternity for young people. CEL 01 (2012) is a key driver for the provision of advice about effective contraceptive advice (including LARC), for women, particularly vulnerable women, prior to discharge from maternity services in Scotland.
- There is evidence that enhanced home visiting beginning pre-natally and extending upto 18 months by professionals (such as the Family-Nurse-Partnership) can reduce repeat pregnancy and births and increase the spacing of pregnancy. FNP can have a positive impact upon the social and emotional development of young mothers and their children (see link 4.3).
- There is mixed evidence about the effectiveness of community based interventions

in reducing repeat pregnancy. Some studies of home visitor programmes and peer support programmes showed a positive impact on reducing repeat pregnancy whilst others found no effect of repeat pregnancy. There is evidence from single studies that sibling pregnancy prevention programmes and generic programmes may be effective in preventing repeat pregnancy and subsequent birth.

- There is good evidence that intensive care management delivered by culturally matched social workers as part of a multicomponent intervention may have a positive impact on reducing repeated pregnancy.
- There is good evidence that curriculum interventions which include community outreach may be effective in reducing pregnancy rates and some evidence that this may be particularly the case for teenagers who are already parents.

HIA note:

The reviews of effectiveness of interventions to reduce repeated pregnancy amongst young mothers under the age of 25 included interventions which target socially disadvantaged young women

Family-Nurse-Partnerships programmes targeted various groups of vulnerable first time mothers including mothers who were under 20 years of age.

Activity: Young pregnant women are supported to access perinatal services especially those who are vulnerable

Link 4.2

The provision of age appropriate and holistic perinatal services will contribute to young women having greater knowledge and understanding of all available services and greater confidence to access the range of health and social care services appropriate to their needs. This will increase the likelihood that they will access and maintain contact with services which will meet their health and social needs and will contribute to improved health and social outcomes for themselves and their children.

Evidence/plausible theory

Complex needs of young pregnant women

Pregnant adolescents often have complex social needs during and after their pregnancy including: social economic deprivation; current or recent experience of being in looked after accommodation; homelessness; poor engagement with education. These factors are associated with lower levels of access to and use of services which in turn are associated with poor health and social outcomes for both mother and child.³⁵

Mental health was identified by young people in Scotland as a particular area of need due to the associated stigma and fears about child protection issues.⁵⁷ Evidence suggest that pregnant adolescents and teenage mothers are at increased risk of mental health problems as a result of both cumulative and current life stressors.⁵⁸ Whilst mental health problem during pregnancy and the postnatal period are associated with increased risk of adverse outcomes for children these are not inevitable.⁵⁹

Accessing perinatal services

A review of UK-based qualitative research identified a large number of potential service based and personal barriers for young women accessing ante-natal care. NICE identified the following as particularly important²: treatment/attitude of staff; young people not wanting to recognise pregnancy/embarrassment of unplanned pregnancy/afraid to tell parents; having social problems that were more important to focus on than health care; waiting time at appointment; transportation; and age discrepancy between selves and other service users.⁷

A recent evidence review considered the effectiveness of a range of approaches to improving access to antenatal care. These included specialist services for young women; school-based versus hospital based comprehensive antenatal programmes; community based versus standard care and community based (with lay home visiting') versus multidisciplinary hospital-based care. However the most effective means of increasing access to antenatal services is unclear.⁷

There is promising evidence, from two studies, that a specialist service for young women which emphasises the early initiation of care and a multifaceted community based service (including home visits by trained lay advocates) will result in early booking. There is, however, no evidence to suggest any significant benefit in relation to booking gestation and it is not clear which components are critical for improving access. The evidence is of poor quality and largely conducted in the US.⁷

Other promising interventions for socially disadvantaged and vulnerable women include mobile clinics offering walk-in appointments, link workers and culturally appropriate community based programmes. However no robust evidence has been identified and there is a need for further investigation of these approaches in the UK.³⁵

Maintained contact with services

The review found good evidence from seven studies that the provision of antenatal classes designed for young women aged under 20 appears to improve contact with antenatal care. In addition six studies found that that home visiting can improve contact and that the provision of transport to and from antenatal services also improves contact. However, some of the positive effects were only observed in pilot studies prior to the wider implementation of a programme.⁷

² The process by which the NICE Guideline Development Group (the expert group which considered the evidence and develops recommendations for a particular piece of NICE guidance) reduced the number of barriers had limitations and therefore we suggest the reader considers the full range of barrier identified in the review when considering their own services

There is some evidence that specialist antenatal services can improve contact with services. One study, conducted in Lisbon evaluating a specialist service providing continuous care by one obstetrician, reported improved contact. Two other studies showed significant improvements in the number of antenatal visits made by those attending dedicated ante-natal services designed for pregnant young women aged under twenty. However it is not possible based on the available evidence to differentiate which aspects of the services described have made a difference to outcomes.⁷

The NICE Guidance Development Group (GDG) acknowledged continuous care as representing good practice and as potentially helpful in overcoming the barriers to antenatal care identified. The GDG proposed that services should enable continuity of antenatal care from a single carer (named midwife) and noted that named midwives should have communication skills and the appropriate knowledge to meet the needs of this population.⁷

No studies were identified by NICE that reported the effectiveness of specialist antenatal care intervention in terms of health gain for the mother or baby. The cost effectiveness models and analyses suggest that a specialist service could be cost effective if it results in more early booking and maintenance of contact than routine care alone. To ensure the cost effectiveness of a service, the number of women who need to book in the first trimester is dependent on the level of specialist service provided.⁷

Additional consultations and support

The review considered four forms of additional consultation and support for young women to improve pregnancy outcomes: multi-faceted services providing social support; information and facilitated contact with health and social care; comprehensive antenatal services including health and social care; and, school-based services.⁷

Overall the evidence is inconclusive; some studies suggest benefit and some little or no benefit. No studies demonstrate harm. Due to the quality of the evidence it is not possible to discern if any particular aspects of the interventions have consistently led to significant positive outcomes. Most of the studies were conducted in the USA.⁷

Additional information

There is limited evidence about what additional information should be provided to women under 20, their partners and families in order to improve pregnancy outcomes.⁷

[NICE Clinical Guidance 110](#) makes a number of recommendations specifically in relation to young women under 20 who are pregnant.

These include:

- *Care provision*: Encouraging access to antenatal care through provision of age appropriate services, recognition that young women may be dealing with a range

of social problems, help and information about transportation to and from services, community based services and opportunities for partner/father involvement in antenatal care with her agreement.

- *Service organisation:* Partnership working to improve access and contact with anti-natal services, considering establishing specialist antenatal services for pregnant teenagers using flexible model of care tailored to the needs of the local population. Whilst not recommending a particular model, they note that continuity of care for teenagers is beneficial to their continued attendance and suggest care is provided by the same health professional.
- *Information and support:* age appropriate information in a range of formats about ante-natal services and other relevant services and benefits.
- Training for healthcare staff.

NICE suggest audits of existing services and new services will contribute to further development of the evidence base.

Enhanced home visiting

Enhanced home visiting for teenage mothers delivered by specialist nurses during pregnancy and the first 18 months of a child's life is one model of continuous care by a named professional (for example the Family Nurse Partnership).

Preliminary evidence from the formative evaluation of English FNP suggests that the programme had good engagement, with 87% of those invited taking part in the programme and a high number maintaining their engagement in the programme. The majority of who enrolled in the programme were from socially disadvantaged circumstances.⁶⁰ There is also evidence that FNP programme can have short and long term positive health and social impacts for both first time mothers and their children (see link 4.3).

A note on mental health

[NICE Clinical Guidance 192](#)⁶¹ on ante and post-natal mental health acknowledges the increased risk of mental health issues for pregnant adolescents. It highlights evidence from one study that teenage mothers expressed a need for information about mental health and available support services and, increased awareness amongst healthcare staff about the psychosocial and mental health needs of pregnant teenagers and young mothers. The guidance provides recommendations for the management of mental health problems during and after pregnancy and recommends that staff are familiar with relevant information about confidentiality, the rights of the child and the need to gain appropriate consent.

Mental health interventions for adolescents who are pregnant and in the postnatal period should be age appropriate. [NICE Clinical Guideline 28](#) for the management of depression in children and young people provides guidance for depression in young people; however, this does not make specific reference to mental health problems during pregnancy or following the birth of a child.⁶²

There is limited highly-processed evidence about effective interventions for peri-natal mental health problems experienced by young mothers. A recent review found

promising results for treatment and preventative approaches however the quality of the studies suggest that further research is needed in this area.⁵⁸

Summary

- There is good evidence that young women experience a large number of personal and service level barriers to accessing antenatal care.
- There is promising evidence that specialist service which emphasise early initiation of care and multifaceted community based services, including home visits by trained lay advocates', increase early booking.
- There is good evidence that antenatal classes designed for young people, home visiting and assistance with transport costs, specialist antenatal services and continuity of care for young women help young people maintain contact with services. There is inconsistent evidence about the most appropriate additional services and limited evidence about what additional information is need to support young women.
- NICE guidance provides a number of recommendations to improve access and contact with antenatal services amongst young women aged under 20 who are pregnant covering service organisation, training for healthcare staff, care provision and information and support for women.
- There is evidence that the English FNP programme has good engagement with young people. Evidence from the USA suggest that FNP programmes can have positive impacts on health, social and emotional outcomes for socially disadvantaged mothers and their children.
- Mental health problems during pregnancy and motherhood emerge as a significant issue for young people. Age appropriate interventions to address mental health issues and the associated stigma are important and are an area warranting further investigation.

HIA note:

The evidence includes a review of views of pregnant young women and reviews of the effectiveness of service interventions for pregnant teenagers and vulnerable young pregnancy women and mothers.

Activity: Young parents are supported to have good quality, affordable, flexible childcare and housing and early social support for themselves and their children

Link 4.3

The provision of good quality support for young parents and their families to access housing, childcare, training and education and other services will contribute to young parents having increased contact with services and gaining the knowledge and

confidence to access the wider range of services available to them. In the longer term this will contribute to greater engagement for teenage parents in education, training and employment and ultimately to improved health and social and outcomes for both the young parents and their children.

Evidence/plausible theory

Although teenage parenthood is a positive experience for many young people, it is associated with an increased risk of a range of poor social, economic and health outcomes.¹⁴ The *Growing Up in Scotland* survey indicates that young mothers have lower qualifications and lower levels of employment than older mums and that this is maintained over time. A greater proportion of young mums in Scotland are in the lowest income quintile, are more reliant on state benefits and credits and, live in rented accommodation in the most deprived areas. This remains the case as the child ages. The data also suggests that mums under 25 rated themselves as having poorer physical and mental health than older mums (25 and over).⁶³

Views of young parents

There is review level evidence from UK-based qualitative studies that young parents perceive themselves as experiencing a range of difficulties and challenges in relation to housing, money and benefits, childcare, education and training and employment and careers.⁵ A number of themes run through these experiences:

- Diverse needs and preferences but a lack of choice
- Struggling against negative stereotypes of teenage mothers
- Heavily reliant on family
- Needing to consider the wider costs and benefits of education and employment
- Continuing to experience the problems they experienced prior to parenthood (including a dislike of school, low expectations, poverty, violence and unhappiness).

Interventions to support teenage parents

Education/career development, welfare sanctions and bonus programmes and holistic programmes

A meta-analysis of 6 good quality studies found that that education/career development interventions and, welfare sanction and bonuses programmes are effective in improving participation in education, training and/or employment. However education and career development programmes appear to be more effective and also have a positive impact on educational attainment. Quality of implementation is particularly important; programmes experiencing implementation difficulties had a smaller impact. There is no evidence that either type of programme had a long term impacts on employment rates. The evidence suggests that focusing solely on educational courses does not improve employment prospects rather a clear

focus on employment and provision of jobs and higher earning for teenage mothers is associated with improved long-term self-sufficiency.⁵

On the basis of the experience and views of young parents, career and educational interventions may be more appropriate to the needs of young people as they improve access to relevant and tailored information and advice about choices, and raise employment and career aspirations of young people. In contrast welfare sanction and bonus programmes may be inappropriate, further reinforcing negative stereotypes of young people, ignoring the wider costs and benefits of education and employment in the short term and reducing the level of choice.⁵

Holistic programmes, such as the Sure Start Plus Programme, aim to reduce the risk of long-term social exclusion associated with teenage pregnancy and parenting. These types of programmes address many of the needs identified by young people however; the effectiveness of these programmes in terms of improving participation in education, training or employment has not yet been established.⁵

Both education/career development interventions and holistic programmes had a positive but non-significant effect on emotional wellbeing. Education/career development programmes, holistic and day-care programmes also show promising effects in terms of reducing further pregnancies but these effects were not statistically significant.⁵

On the basis of the available qualitative and quantitative research a number of potential interventions were recommended.⁵

- Education and career development programmes with support for childcare rather than welfare sanctions.
- Holistic programmes like Sure Start Plus. Whilst the evidence suggests these programmes may be appropriate for young parents it is not clear if these types of programmes are effective in reducing social exclusion. Based on the views of young parents Harden et al suggest the following should be included in holistic programmes
 - Tailored information and advice about choices for education, training, employment and careers, childcare, money and benefits and housing
 - Individualised plans for return to education and employment which consider the wider costs and benefits of such a return
 - Specialised services for young parents
 - Advocates to help young parent approach services and/or co-ordinate cross agency support to better match young parents needs
 - Childcare provision
 - Interventions to reduce domestic violence and improve relationships
- Continued action to tackle social disadvantage and poverty amongst young people

A number of interventions to support young parents and foster social inclusion were proposed as 'promising' and worthy of development and testing on the basis of young people's views rather than studies of effectiveness

- Anti-discriminatory policy and practice for schools and other professional services
- Reality workers (people who have been through similar experiences) to support young parents

- Creation of viable choices for young parents in terms of housing, education and training, employment and careers, money and benefits and childcare

Enhanced Home visiting

There is evidence from 3 good quality trials that the Nurse Family Partnership Programme (known as the Family Nurse Partnership Programme in the UK) has a range of positive short, medium and long term benefits for both mothers and their children⁵⁶.

For mothers shorter term outcomes include improvements in pregnancy health and behaviour; mother–infant interaction, breastfeeding initiation, parenting and medical knowledge, parenting satisfaction, a sense of being supported and self-efficacy. In the longer terms the programme was associated with reductions in use of welfare, greater employment, fewer arrests and convictions and a reduction in domestic violence amongst mothers.

Home visiting programmes are also associated with improvements in some child cognitive outcomes, positive health behaviours and emotional development as well as the prevention of injury. The best outcomes are seen in children of mothers with low emotional intelligence and/or poor mental health.

Several cost studies in the USA suggest a positive return of \$4 to \$6 for every \$1 invested in the programme. This has been translated to the English context to be a societal return of £1.94 per £1 based on an annual rate of return of investment of 6%.⁶⁴

To ensure that programmes and interventions are effective it is important that they are delivered as designed, following any implementation guidance from developers. Although the evidence is unclear about the optimal duration, intensity and other characteristics of home visiting implementation there is review level evidence that the effectiveness of home visiting programmes for high risk families including teenage mothers is dependent on a range of process factors. These include intensity and frequency of the service and the skills of the programme providers. Programmes appear to be more effective when they: last more than six months; involves more than 12 visits ; begin antenatally or at birth rather than later, are delivered by professionals rather than paraprofessionals/lay providers and are structured and focuses on a broad range of outcomes for both the mother and child. Enrolment based on demographic or community level risk factors is preferable to enrolment based on individual risk factors as assessment to identify risk during the ante-natal period is both unreliable and stigmatising.^{5,51,56}

Child care

There is review level evidence that childcare has a positive impact on mother's education and employment.⁶⁵ An evaluation of the Abecedarian Project, specifically

targeted at teenage parents, reported that teenage mothers were more likely to: have completed high school; participated in post-secondary training; be self-supportive; be employed; and, have jobs that were skilled or semi-skilled. In addition they were less likely to have subsequent children. A second study of a day care provision and professional training also found an increase in education and training.^{5,51}

Summary

- Young parents experience a range of problems in relation to housing, childcare, finances, education, training and employment. Common themes include diverse needs and lack of choice; stereotypes of teenage mothers; reliance on family; consideration of the cost and benefits of education and employment; and, continuation of social problems prior to pregnancy. Actions to meet these needs may contribute to improved life courses for teenage parents.
- There is reasonable evidence that education/career development programmes and welfare sanctions and bonus programme programmes are effective in improving in education and training. However the former are more effective and may be more appropriate to the needs of young people. Neither types of programme had a long term impact on employment rates.
- Education/career development interventions and holistic programmes had a positive but non-significant effect on emotional wellbeing and had a non-significant impact on reducing further pregnancy.
- Holistic programmes address many of the needs identified by young people however; the effectiveness of these programmes in terms of improving participation in education, training or employment has not yet been established.
- A number of actions for social inclusion have been proposed on the basis of the available qualitative and quantitative evidence.
- There is evidence that enhanced home visiting is effective in increasing maternal employment as well as reducing use of welfare, arrest/convictions and domestic violence.
- There is evidence that day care for young children is associated with improved prospects of education, training and employment for mothers, including teenage mothers. The Abecedarian project, an early childhood intervention targeted at teenage parents was associated with improvements in high school completion, participation in training and employment as well as a reduction in repeat pregnancy.

HIIA notes:

The evidence includes a review of the views of young parents, many of whom are experiencing social disadvantage. Reviews of effective interventions specifically include targeted interventions for young people who are socially disadvantaged.

Activity: Interventions specifically targeting fathers are developed and delivered

Link 4.4

Interventions tailored to support fathers will contribute to fathers accessing services earlier, having increased knowledge about parenting and a smoother transition to fatherhood. Improved service provision for fathers will also contribute to greater awareness amongst services providers about the needs of young fathers. These outcomes will contribute to greater engagement in services by young fathers. This in turn will contribute to improved social outcomes for young parents.

Evidence/plausible theory

Fathers play an important role in children's lives and their attitudes and behaviour can have implications (positive and negative) for both the mother and child.⁶⁶ A recent mapping of qualitative research exploring the experience of young fathers suggests they have varying attitudes to fatherhood. They often experience difficulties in transitioning to parenthood and may have negative experiences of service provision, perceiving healthcare staff as marginalising and excluding them from decisions making in pregnancy and early post-partum.⁶⁶

Overall there is limited highly processed evidence about how to effectively and appropriately engage fathers (the partners of teenage mothers) in services to improve outcomes for themselves, their partners and their children. Of particular relevance are two UK studies of reasonable quality.

Findings from the formative evaluation of FNP in England suggest that the programme resulted in good engagement with fathers. The study reported father involvement in at least one session for 50% of those enrolled on the programme.⁶⁰

An evaluation of SureStart Plus suggests that interventions specifically focusing on fathers may increase the proportion of fathers receiving: information about health; advice and provision of contraception; help in giving up smoking; advice about domestic violence; and help about housing issues. However these findings were not significant and there was no evidence, due to the small sample sizes, of an impact on health or social outcomes.⁶⁷

The evaluation of SureStart Plus noted that little investment was made initially in work with fathers. This was possibly due to: lack of prioritisation amongst the Sure Start Plus programmes; a perception among staff of a conflict of interest between working with young female clients and young fathers; and, a lack of guidance about how to work with young fathers.⁶⁷

The limited available evidence (including qualitative research on the views of young fathers and evaluations of intervention) suggests that there is a need for services to be 'parent friendly' and inclusive of fathers as well as mothers. Personal advisors

(recommended as one of the main vehicles of support in Sure Start Plus) offered separately for young mothers and young fathers may help staff avoid conflicts of interest when trying to support both young mothers and fathers (for instance with domestic violence or custody issues) and help ensure that the needs of young fathers are not subsumed by more obvious support needs of young mothers.⁶⁷

Summary

- There is limited highly processed evidence about the experiences of young fathers and how to effectively and appropriately engage them in services to improve outcomes for themselves, their partners and their children.
- There is promising evidence from evaluations of FNP and Sure Start Plus which begin to address this area.

HIA notes: The evidence is drawn from studies of services directed to teenage mothers which also provided services for the partners of teenage mothers

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