## A randomised controlled trial of the effectiveness of parent-based models of speech and language therapy intervention, and parent attitudes, for 2 to 3 year old children with primary language delay in areas of social disadvantage.

## Background, case for importance and originality of the project:

Primary language delay remains one of the most prevalent developmental delays in early childhood and previous research has established that language difficulties are a particular risk factor for adverse outcomes (Marmot, 2010). The Marmot review of health inequalities stressed that reducing social and health inequalities requires a focus on improving educational outcomes. The report identified communication skills as being necessary for children to succeed at school, avoiding poorer social and economic outcomes later in life. Language delay has a knock-on effect on school readiness, literacy and school performance, putting children at risk of long-term consequences such as literacy, mental health and unemployment.

Research has established that the prevalence and prognosis of early language delay is exacerbated by social disadvantage in two ways. Firstly, low socio-economic status has been identified as a predictive factor in indicating persisting language difficulties and adverse outcomes (Paul & Roth, 2011; Fernald et al, 2013, Clegg et al, 2015). Secondly, in disadvantaged areas, access and engagement with services is a challenge, and health outcomes are affected by both social and geographical factors (Maggi et al, 2010).

However, research indicates that the negative effects of social disadvantage can be mediated by a positive parenting environment (Gutman & Feinstein, 2007; Raviv et al, 2004). Although it is unclear exactly how parental attitude and involvement mediates the impact of intervention, evidence links the home learning environment, including parenting behaviours, skills and attitudes, to children's learning outcomes at age three and five (Gregg & Goodman, 2010; Growing Up in Scotland, Scottish Government, 2015).

The Government is committed to eradicating child poverty by 2020 (Child Poverty Act, 2010). Subsequent reviews concluded that children's life chances depend on their development in the first five years (Field, 2010), and identified the need for specific programmes to enable children aged 0 – 3 to reach their true potential (Allen, 2011). The Government All Party Parliamentary Group (APPG) report (2013) highlighted that the links between social disadvantage and language needs are highly relevant to the government's commitment to reduce health inequalities. The report concluded the crucial importance for socially disadvantaged children of home environments that effectively promote the development of language. It recommended additional support in the early years, with effective interagency collaboration. Several universal parent-based interventions on non-clinical populations have been reported recently, but have been unable to show a treatment effect (eg Wake et al, 2011, Smith, 2015; Suskind et al, 2015 ).

In terms of a clinical population, early primary language delay can be supported effectively through parent-based intervention (PBI) (Gibbard, 1994, 2004; Cochrane Review 2003/09; Allen, 2011). It is an effective intervention for 2 to 3 year old children clinically diagnosed with primary language delay, and is used throughout England. However, as engagement with services is low in areas of social disadvantage, families often opt out of intervention and children in these areas fail to develop their language potential. The challenge is therefore to provide a PBI service that is accessible to families from disadvantaged areas. Enhanced PBI (EPBI) has been developed in Portsmouth (Gibbard

& Smith, 2012), in line with the NHS Five Year Forward Plan, as an enhanced, interagency, integrated form of the standard PBI care, aiming to increase engagement by reducing barriers, such as location of sessions, childcare availability, lack of confidence, attitudes and motivation. A local pilot project evaluated EPBI in areas of social disadvantage and demonstrated increased parental engagement with the service and equal child outcomes to the original PBI delivered in non-disadvantaged areas.

This project is original in proposing to evaluate the effectiveness of a parent-based intervention for a clinical population of 2 to 3 year olds with a diagnosis of primary language delay in areas of social disadvantage. It is also original in developing an interagency, integrated model of delivery (NHS 5 Year Forward Plan) and in examining the effect of parent attitudes on child outcomes.

**Aims of the research and expected outcomes**: (1) to carry out a randomised controlled trial (RCT) to evaluate the clinical effectiveness of the EPBI programme compared to the standard PBI in 2 to 3 year old children with a clinical diagnosis of primary language delay in areas of social disadvantage. These outcomes will lead to a clearer understanding of the value of delivering parent based intervention with socially disadvantaged clinical populations. (2) to evaluate the effect of parental skills, attitude and confidence to engagement with treatment, and child outcomes. These outcomes will lead to a clearer understanding of the practical, physical and psychosocial effects of the home learning environment on children's language development.

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