Author’s response to reviews

Title: Health professional perceptions regarding screening tools for developmental surveillance for children in a multicultural part of Sydney, Australia

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Author’s response to reviews:

AUTHORS’ RESPONSE TO THE EDITOR

The paper requires substantial revisions before it can be accepted for publication.

Thank you for the helpful feedback and the opportunity to revise this paper. The revision incorporates comments and requests from the editor and reviewers and has been substantially revised. The authors believe the manuscript is improved with these additions.
Editor Comment             Response

1. I would like the authors to address both reviewers’ comments.

   See responses below to the comments from both reviewers

2. Check they have structured and formatted the paper in accordance to BMC guidance

   We have checked and formatted the paper according to the BMC guidance.

3. Strengthen the Introduction by highlighting the need for this study and what original contribution it makes

   We have rewritten and strengthened the Introduction/Background and elaborated on the original contribution the study makes particularly in the Australian health context. We have elaborated that there was a knowledge gap in the process of developmental surveillance and therefore a larger longitudinal Watch Me Grow study was planned in Australia. (Please see, Background, Page 8, Paragraph 1.2). The aim of the component of the WMG study was to study the perceptions of the health professionals regarding use of screening tools for developmental surveillance.

4. Discuss the extent to which findings can be generalized beyond Australia.

   We have discussed the extent of our findings in the global contexts. We have highlighted in discussion that similar barriers in use of screening tools have also been reported from many other countries. Background, Page 4, 5, Paragraph 1.1 & Paragraph1.1.1, Discussion, Paragraph 2, 3, 4.

5. Explain what the aim of the qualitative study was and why the Watch Me Grow cohort study was a suitable study in which to nest this work
We have elaborated on the aims of the ‘Watch Me Grow’ (WMG) study in the introduction and why WMG study gave us an opportunity to study and collect qualitative data on health professionals’ views on screening tools. The aims of the qualitative study are reported in Background, Page 8, and Paragraph 1.2. The WMG study was suitable for conduct of this study as this was formed of a partnership of policy makers, service providers and researchers for understanding a national approach for developmental surveillance for Australia using an example of a defined multicultural region of Australia.

6. Explain why both interviews and focus groups were used and what questions were asked in each

We used in-depth interviews to share personal experiences of the health professionals in detail and focus groups to elaborate shared interests of the nursing health professionals. There were logistic reasons as well because individual interviews with doctors gave flexibility to fit into their schedule. This has been included in the Methods section, Page 10, Paragraph, 2.3 recruitment and sampling.

7. How analysis of the interview data did/did not differ from the focus group data

The thematic analysis of the interviews did not differ from the analysis of the focus group data. This has been included in Methods, Section, Data analysis, Page 11

8. Check they have presented the qualitative data appropriately, e.g. avoid quantifying qualitative material, and have 'mapped' the findings rather than simply mentioning the most frequently mentioned themes.
We have now mapped the data and the findings and included findings from Table 3 within the body of the text as requested by the reviewer 2. We have avoided qualifying information in Table 2 to maintain anonymity and quantifying information is no longer included.

9. Check whether there is missing text under the heading Addresses parents' concerns   Thank you. The heading has been amended to ‘Reassurance to parents about their concerns’ and additional text added.

AUTHORS’ RESPONSE TO REVIEWER 1

Despite a comprehensive policy statement of the American Academy of Pediatrics (AAP) on surveillance and screening published in 2006 (Pediatrics Jul 2006, 118 (1) 405-420; DOI: 10.1542/peds.2006-1231), how to best perform early detection of young children at risk for adverse developmental outcomes remains a topic of considerable interest and some controversy. Furthermore, how to best apply the precepts of surveillance and screening in a culturally-appropriate manner and how to best engage parents of diverse cultures and beliefs demands further research. Thus, this study of health providers' perceptions regarding surveillance tools in multicultural Sydney is of potential interest to researchers and clinicians, alike. The findings of challenges of time, tool awareness, referral pathways, and access to services validate past research and confirm the need to view early detection within the context of a comprehensive, integrated process of developmental promotion, early detection, referral and linkage (J Dev Behav Pediatr 2015; 36:637-638. DOI: 10.1097/DBP.0000000000000216). Furthermore, findings confirm the importance of interpreting screening tools within the context of all that is known of the child and family. The study's potentially useful implications may be strengthened by the authors addressing a number of limitations and issues, as well as clarifying their use of language and terminology. As an American reviewer, I am respectful of but challenged by the authors' use of the term surveillance. As implied in my first paragraph of this review, the AAP has endorsed the integrated, comprehensive process of surveillance and screening, whereby surveillance represents the longitudinal process of eliciting parents' opinions and concerns, taking an informed developmental history, performing skilled observations of children, and,
particularly when concerns arise, soliciting input from those who are able to observe the child, such as child care providers and educators. The screening component of surveillance and screening refers to the periodic administration of standardized tools to enhance early detection and ensure that children do not evade such early identification. Importantly, the limitations of such screening tools, by virtue of the complexities of developmental trajectories, demand that results always be interpreted in the context of all that is known of the child and family. Thus, the reference to the PEDS and ASQ as surveillance tools, rather than screening tools, is admittedly distracting and fails to acknowledge the critical role of the longitudinal process of engaging parents and eliciting their opinions and concerns as a crucial element in early detection. While I do not wish to debate the merits of American and Australian terminology or expert opinion as to processes, and am both mindful and respectful of the strong impact of Australian thinking on early detection (for example, Australian Family Physician; Melbourne34.9 (Sep 2005): 739-42), both the PEDS and the ASQ were developed by Americans as developmental screening tools, that is validated instruments to be periodically administered to enhance the efficacy of early detection. Furthermore, in concert with the evolution of thinking as to best practices in early detection, both the PEDS and ASQ are now recommended as screening tools to be used in the context of the integrated process of surveillance and screening.

Thank you for providing this feedback. We have now changed the terminology throughout the manuscript as screening tools within a surveillance program. We have thus referred PEDS and ASQs as screening tools. We have acknowledged the concepts of screening and surveillance within the revised paper (page 4, Background, Paragraph 2). We have also changed the title as “Health professional perceptions regarding screening tools for developmental surveillance for children in a multicultural part of Sydney, Australia” to reflect the change of terminology.

We have also acknowledged that the findings from our study corroborate with the past research and confirm the need to view early detection within the context of a comprehensive, integrated process of developmental promotion, early detection, referral and linkage (discussion, Page 19, paragraph 2).
We have also highlighted child health promotion is a priority area for the region of the study, and screening and surveillance are a part of this broader child health promotion program (Page 9, paragraph 3).

Reviewer Comment  
Response

1. The study's potentially useful implications may be strengthened by the authors addressing a number of limitations and issues, as well as clarifying their use of language and terminology…. Can the authors reconcile their use of terminology such that their findings may be useful for a broad audience? Alternatively, they could perhaps explain their use of the term surveillance and support their rationale for referring to the PEDS and ASQ as surveillance tools to minimize readers' confusion.

   We agree that it is critical to acknowledge the longitudinal surveillance process and now highlight in the revised paper that screening tools have to be embedded within that process. The language and terminology is now consistent throughout the manuscript.

See: Introduction, Paragraph 1: “An Australian Early Development Census (AEDC) has revealed that 22% of children are developmentally vulnerable in one or more domains at the time of first year of full-time school, with the potential to negatively impact on their long-term capacity to learn [1]. This situation is not confined to Australia and is of particular concern due to the known importance of the early years for child development [2]. Internationally, and in Australia, developmental surveillance programs have been instituted as a means of early identification, by including the use of validated screening tools, as well as a focus on prevention through child health promotion activities [3, 4].

We have also acknowledged the other skills necessary for health professionals for child health promotion by including the following statement in the introduction “Developmental surveillance involves longitudinal elicitation of parental concerns, obtaining an informed developmental history, performing skilled observations of children, and soliciting information from child care providers when concerns regarding a child’s development become evident” ” –
2. The authors raise important concerns for the need for training in the use of tools such as the PEDS and ASQ and cite the modest use of such tools in current practice…. health professional views on the efficacy and utility of the PEDS and ASQ are of interest and would likely yield implications for training.

Thank you. The need for training is included in the implications for practice section 4.2.

3. The qualitative research methods employed in the study and the intriguing, albeit highly conceptual mixed methods design are helpful in capturing such views. However, for the uninitiated and unfamiliar reader, the description of the realist philosophical approach is daunting and would benefit from simplification and a clearer explanation.

We have deleted the realist philosophical approach to focus more on data analysis and results. We agree a mixed methods research design is ideal for understanding health professional perceptions, but the qualitative arm of the broader longitudinal birth cohort ‘Watch Me Grow’ study helped us in in-depth exploration of the health professionals’ views on use of screening tools within their practices.

4. Findings from this study are difficult to interpret without an understanding of the current training of child health professionals, the extent to which surveillance and screening is recommended as core components of child health surveillance services, whether professionals are held accountable to standards and required to document their adherence and use data to inform their quality improvement activities, and their access to and support from a system that enable vulnerable children identified to be at risk to be effectively linked to assessment and intervention services as indicated. To what extent is developmental promotion a priority for child health surveillance services? If not a priority supported by education, training, and a robust, system, the lack of knowledge and deficits in practice are not surprising. A better understanding of the context for the study would assist the reader in deriving potential implications for training, practice, and policy.
We have included the level of child health professionals training in use of these tools in the introduction (Page 9, Paragraph 2 and 3). There are some obvious differences in the way training for nursing and medical professionals are conducted.

Child health promotion is a national priority for Australia and NSW and in this region of relative disadvantage of Sydney. This has now been acknowledged in the Introduction and Methods section (Page 9, paragraph 3).

5. In summary, the perceptions of child health professionals regarding screening tools are of interest and potentially useful in deriving implications for practice, training, and policy. I encourage the authors to reflect on their use of terminology and ensure adherence to current concepts of surveillance and screening, to place their findings within the context of services and system support, and to expand their focus beyond screening tools in isolation to a more comprehensive, robust, integrated process of developmental promotion, early detection, referral and linkage.

We have now adhered to the concepts of screening and surveillance and used the terminology as “screening tools” within the process of longitudinal developmental surveillance program. We have discussed the programs which are already placed for child health promotion in the region, and how these are being attempted to integrate and link with each other.

6. I am concerned that an isolated focus on screening tools that merely reinforces well-recognized barriers yields limited implications with respect to achieving the goal of child health providers' effective promotion of children's optimal healthy development. The authors appropriately cite the need for a "comprehensive and integrated delivery model." Strengthening this manuscript may best support this important recommendation.
Although we focused on the perception of screening in these paper this is not an isolated area for child health promotion and is incorporated within multiple programs for child health promotion. This has been appropriately cited and acknowledged throughout the revised paper.

AUTHORS’ RESPONSE TO REVIEWER 2

This is an important study of how health care providers value and understand the developmental instruments they are required to use.

We appreciate this comment from the reviewer - the manuscript has been revised to incorporate the feedback.

Reviewer Comment   Response

1. Background/Introduction

Page 4, lines 22 - 29, it is not clear why, in a paper devoted to health professionals, the comment about attendance at early childhood centers if relevant.

   We acknowledge this comment.

This was an omission – the text should have read ‘attend an Early Childhood Health clinic’ and has now been amended (see Page 5, paragraph 3))

2. Page 5, lines 12- 14, The ASQ Tools and PEDS Tools are designed for parents who may not know much about child development and both have been proven to identify problems regardless of parents’ educational background (and parenting skills). So this comment is both irrelevant to the topic of the paper and incorrect. Also, one of the goals of PEDS is to identify parenting issues related to lack of child-rearing knowledge so that clinicians can offer developmental promotion
and parenting guidance (e.g., in response to concerns such as, "I don't know what a 2-year-old should be able to say.").

This comment has been deleted, and the uses of PEDS for identifying problems from parents of all educational backgrounds have been acknowledged. The challenges for CALD populations for PEDS have also been acknowledged (Page 18, 19, last and first paragraph).

3. Page 5, ~ line 29, did the authors mean "use and utility"?

This line has been deleted.

4. Background Overall: the background section should focus more on what is already known about providers' use of standardized measures including whether referrals are made when indicated, knowledge of resources and parent education materials.

The introduction and background have been re-written to include previous literature around use of these tools. The local health district (LHD) in which the study was conducted has records related to quality improvement activities to check if the tools were used, documented and evidence that information etc. was provided. CFHNs do this, on a regular basis, and it is unknown whether GPs participate in regular audit activities or not regarding use of the screening tools.

5. The description of the measures used should be moved to the Methods section and include more detail about how each tool works. A table might be an efficient way to illustrate differences in instruments.

The description of the PEDS and ASQs have been moved into Methods section and summarized in Table 1 in the revised manuscript. The differences of the tools are highlighted in the Table.

6. Methods
This section is clear, but probably too long. I'd be tempted to reduce or eliminate the philosophy of qualitative research (first two paragraphs). NVivo software needs a reference re: publisher, URL, etc.

    We have deleted the philosophy of the qualitative research. NVivo reference is included, reference 54.

7. Results

The first two paragraphs need rewriting for better clarity and jargon reduction (e.g., "attendance at surveillance services" - does that mean in-service training for professionals? Parents not bringing children for care?). One possibility might be to simply list the thematic categories extracted since each of these is much better explained in following paragraphs.

    The first two paragraphs have been rewritten to summarize the findings, and clarify the themes using simple language.

8. Table 3 might be inserted somewhere later in the results section.

    Quotes and findings from Table 3 have been mapped within the results section, and Table 3 has been deleted from manuscript.

9. Discussion

    This manuscript has many implications for practice and so practice recommendations should be listed at the end of the paper.
We acknowledge this comment from the reviewer and have included a separate section on implications for practice.

See page 20-21.

10. Action plans addressing issues such as these need to be devised:

An action plan is included in the revised paper as suggested by the reviewer. This has been included in the separate section on implications for practice (page 20-21).

Clinicians seem ill-trained in use of tools and/or in need updated training:

The following sentence have been included “Training and on-going updates in the use of the recommended developmental screening tools are needed particularly for professionals in private practice (GPs and paediatricians)”(Page 20)

Clinicians need a better understanding of parents' perception (e.g., birth order is not known to make a difference in parents willingness to raise concerns. Parents' "denial" is most often guardedness (e.g., "I didn't want to mention my concerns because I wasn't sure they were correct. If there was a problem, my GP would notice and tell me."

This has been addressed by including the statement “Professionals need a better understanding of factors influencing parents' perceptions and reports on their child’s development. These issues were further highlighted in our earlier report exploring parents’ perceptions of their health professional which showed that at times the professionals were reluctant to acknowledge parental concerns[22]. CFHNs in NSW receive education about building relationships and improving communication with families. The Family Partnership Model is one approach that has been used, with extensive training for CFHNs. This, or similar training could also be utilised
by GPs and paediatricians to consolidate and develop existing skills to better understand parental concerns”. (Page 21).

Does the "Blue Book" have scoring guidance and Interpretation of results?

They are part of a separate process – CFHNs have training in scoring, interpretation of results and clear pathways are provided for review and referral. We have acknowledged this limitation for GPs. “Consideration for incorporating PEDS scoring guidance and interpretation in the Blue Book should be made, so that the findings from the PEDS are immediately meaningful for GPs and paediatricians”. (Page 21, last paragraph)

Have trainers customized recommendations for next steps with NSW services and ensured that clinicians know about existing translations (and where to find telephone interpretation services)?

Yes this has been acknowledged that translated materials are now freely available (methods, Page 10, Paragraph 1). Also in the implication section the following statement has been added “There is a need for PEDS trainers to ensure that professionals are provided information about existing translations, and increase their awareness of how to access telephone interpretation services” (Page 21, last para).

“CFHN’s are trained in the use of the tools, and there are clear referral and monitoring pathways. There is an on-going process of updated information for CFHN’s” (Page 20).

Do health care professionals have techniques for encouraging parents to attend well-visits? This information is now included, “Health care professionals particularly the GPs most frequently use SMS reminders and letters for encouraging parents to attend well-visits. There is a need to look at alternate innovative strategies for reminders. In addition, other health promotion and early identification approaches, such as the sustained home nurse visiting programs and other home based vulnerable families’ programs need to be strengthened to engage disadvantaged families” Page 22.

Do parents understand that well-visits are "not just about shots"?
Parents are informed about well-child visits when provided with the ‘Blue Book’ and at every subsequent visit to a health professional. In additional educational community based programs to encourage this are needed.

Are GPs coordinating with home visiting nurses and is cross-service collaboration needed?

Collaboration needs to be increased. Managers identified the value of a ‘one-stop shop’ (included in the results section, Page 16 Paragraph 2.

CFHN make referrals to GPs and other services – audiometry, orthoptists, speech therapists, OTs, dieticians, community paediatrics. Co-ordination of care and sustained home visits occurs for families which are identified as ‘vulnerable’ (Page 22)

Are clinicians aware that PEDS is best used routinely with PEDS: Developmental Milestones (so that providers can obtain swiftly needed information on developmental status and thus whether parenting guidance is needed versus referrals)?

PEDS: Developmental Milestones was in not in use at the time of the study (perhaps due to licensing costs). CFHNs receive training about child development, and use resources such as the ASQs resources for parents about developmental milestones at specific ages. The following statement has been included “The routine use of PEDS: DM needs further exploration for the NSW health system”. (Page 22).