Supporting developmentally vulnerable children in early education

A case study

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Presentation

• Developmental vulnerability & early intervention
• Telecare at RFW
• A case study: RFW & Central QLD, Wide Bay, Sunshine Coast PHN partnership
• Where to next
Developmental Vulnerability and early intervention
CHILDHOOD VULNERABILITY IN AUSTRALIA HITS 22%

• When children start school, nearly one quarter of them are vulnerable:
  - physical health
  - social competence
  - emotional maturity
  - speech/language
  - communication

• In rural & remote areas this number is 2 – 3 times higher
The problem compounds in rural and remote Australia

<table>
<thead>
<tr>
<th>REGION</th>
<th>PHYSICAL</th>
<th>SOCIAL</th>
<th>EMOTIONAL</th>
<th>LANGUAGE</th>
<th>COMMUNICATION</th>
<th>VULNERABLE 1 DOMAIN</th>
<th>VULNERABLE 2 DOMAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUSTRALIA</td>
<td>9.7</td>
<td>9.9</td>
<td>8.4</td>
<td>6.5</td>
<td>8.5</td>
<td><strong>22.0</strong></td>
<td><strong>11.1</strong></td>
</tr>
<tr>
<td>ACT</td>
<td>10.9</td>
<td>9.4</td>
<td>8.2</td>
<td>5.9</td>
<td>7.7</td>
<td>22.5</td>
<td>10.3</td>
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<tr>
<td>BUNDABERG, QLD</td>
<td>12.8</td>
<td>14.8</td>
<td>10.1</td>
<td>8.0</td>
<td>10.5</td>
<td>26.1</td>
<td>14.0</td>
</tr>
<tr>
<td>COONAMBLE NSW</td>
<td>26.8</td>
<td>28.6</td>
<td>19.6</td>
<td>16.1</td>
<td>8.9</td>
<td><strong>41.1</strong></td>
<td><strong>33.9</strong></td>
</tr>
<tr>
<td>FITZROY VALLEY, WA</td>
<td>47.4</td>
<td>18.4</td>
<td>31.6</td>
<td>21.1</td>
<td>28.9</td>
<td><strong>65.8</strong></td>
<td><strong>42.1</strong></td>
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An early intervention approach

• Early childhood interventions attempt to mitigate adverse development in early childhood with a goal of improving a child’s development trajectory over the longer term.

• Well-targeted interventions can substantially reduce the risks and increase the protective factors in children’s environments and enhance their overall development.

• Support those around the child to ↑RESILIENCE.
Telecare
Evidence and programs
Supporting families via telecare

• Can be just as effective as in-person

• Strong evidence in many areas relating to child development such as developmental paediatrics, autism, mental health, childhood obesity, ADHD, speech-language teletherapy, psychology services.

• Provides continuity where outreach and local services are unable to and reduces disruptions to child’s routine

  ‘Right time, right place, right clinician, right frequency’
Use of telecare at RFW

Our Service Model

<table>
<thead>
<tr>
<th>Service Delivery</th>
<th>Capacity Building</th>
<th>Advocacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment, diagnosis and treatment of childhood</td>
<td>Family resilience and parenting support</td>
<td>Research and evidence, including:</td>
</tr>
<tr>
<td>developmental and behavioural disorders</td>
<td>Capacity building and professional support for teachers</td>
<td>- Rural child health</td>
</tr>
<tr>
<td>Telecare programs for speech and language, the motor</td>
<td>and health service providers</td>
<td>- Family-centred practice</td>
</tr>
<tr>
<td>skills, regulation, anxiety/depression and behaviour</td>
<td>Community engagement and capacity building</td>
<td>- Telecare</td>
</tr>
<tr>
<td>Health and developmental screening</td>
<td>Community-led funding models and partnerships</td>
<td>Policy positions</td>
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<tr>
<td></td>
<td></td>
<td>Advocacy partnerships</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Advocacy campaigns</td>
</tr>
</tbody>
</table>

Delivery Channels

- Manly
- Virtual
- Community

RFW Telecare Services

- Speech Pathology
- Practitioner Support
- Dietetics
- Paediatrics
- Psychiatry
- Occupational Therapy
- Psychology
RFW & Central QLD, Wide Bay, Sunshine Coast PHN partnership

What we delivered and what we found
Enhancing access to evidence based service for children considered developmentally vulnerable

- Between Jan and June 2017 telecare services were delivered to 38 children and their families and 20 early educators from 8 early learning centres.

- Of the 38 children who received service:
  - 55% male, 45% female
  - 16% identified as Aboriginal and/or Torres Strait Islander
  - 89% 4 years old; 11% 5 years old.
  - 22 children were supported by a SP or an OT.
  - 16 children received multidisciplinary support.
How did it work?

• Project manager in community visit
• Information on indicators for referral
• Baseline survey and PROMS
• Services delivered
• PROMS, Qualitative feedback & case studies
Baseline survey

Survey of six early educators to understand areas of support and enhance relationships:

• Long wait times, cost and a lack of awareness of child development issues were identified as barriers preventing families accessing services
• All respondents identified speech, language and communication as one of the main needs of the children they work with. This was closely followed by behavioural issues and anxiety.
• All respondents stated that up to 30% of the children they work with are at risk in one or more areas of early childhood development
• All respondents wanted support with attention, regulation and behaviour and half wanted support with developing language
What we delivered

Between January and June 2017, a range of predominantly Speech Pathology, Occupational Therapy and capacity building services were delivered via technology (Telecare) to 38 children from eight early learning centres.

<table>
<thead>
<tr>
<th>Service type</th>
<th>No of sessions</th>
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</thead>
<tbody>
<tr>
<td>Telecare Initial Screening Session</td>
<td>25</td>
</tr>
<tr>
<td>Telecare Assessment Session</td>
<td>63</td>
</tr>
<tr>
<td>Telecare Feedback/Follow Up Session</td>
<td>162</td>
</tr>
<tr>
<td>Telecare Therapy Session</td>
<td>231</td>
</tr>
<tr>
<td>Capacity Building sessions</td>
<td>9</td>
</tr>
<tr>
<td>Grand Total</td>
<td>490</td>
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</table>

Capacity Building Modules delivered to 20 early educators:
- Regulation, Attention and Behaviour
- Classroom Strategies for Supporting Language Difficulties
- Shared Reading: Using books to improve language and pre-literacy skills
- Linking Literacy and Language
- Play skill development
Patient Reported Outcome Measures

A total of 83 goals set using Goal attainment Scaling (GAS) and the Canadian Occupational Performance Measure (COPM). Majority of goals focused on speech sounds and regulation.
GAS goal results

A total of 56 GAS goals were set for 29 children, of these 86% of children met or exceeded at least one of their goals.
COPM results

A total of 29 COPM goals were set for 16 children receiving support from an Occupational Therapist.

Of the 11 children where scoring was completed, 9 children made improvement towards their goals:

• Improvement was made for 15 goals (increases ranged from 1 to 4 points) for 9 children. Parental satisfaction in relation to their child’s performance towards these goals also increased.

• No change in pre and post score were recorded for 6 goals for 4 children. There was also no change in parents satisfaction in relation to their child’s performance towards these goals.
Qualitative feedback - early educators

10 staff from 8 early education centres (directors, area managers):

The service lead to a number of positive outcomes for early educators, children and parents:

• improved outcomes for children
• improved confidence of both early educators and parents
• increased knowledge and skills for early educators
• supported partnerships between early educators and families
• provided an opportunity for proactive early intervention
Qualitative feedback – early educators

Our community are extremely low socioeconomic with high rates of domestic violence, single parent families, foster families and indigenous families. Our parents have no transport, no money and sometimes no will to get their children the assistance they need.”

“...I have found that both Educators and families are more confident to engage in games and play with the children when the intent and purpose is very clear. for example having a defined learning outcome......they have the confidence to pass on information to the families involved which has lead to better connections and partnerships with families. This program has enabled educators to more closely and deeply plan and program for the individual needs of each child.”
Qualitative feedback - parents

9 parents from 5 of the 8 early education centres

Prior to the service, three respondents attempted to access services for their child but were unable to due to long waitlists and services not being available

Parents told us:

• They felt involved in their child’s care and there was a high level of engagement in therapy from their children
• They have a better understanding of their child’s needs
• They feel more able to contribute to their child’s progress
• They have identified improvements in their child’s areas of concern since the service commenced.
Case study – Joshua*

- 5 year old boy referred due to concerns around his speech sounds, behaviour and meltdowns. Previously accessed local service but was now on a long waitlist
- Speech therapy sessions with his mother and early educator + regular follow up at home and preschool.
- Sensory assessment + follow up phone calls with parents and early educator

By the end of the therapy block & implementation of strategies:
- Joshua’s stuttering went from a 4 out of 10 to a 1 out of 10.
- Mothers self rated satisfaction of his behaviour improved from 5/6 out of 10, to a 8/9 out of 10.
- This meant that he was more able to communicate, learn, play and build meaningful relationships.
Points to consider in future work

• Many of the children referred do not have a nominated treating doctor – potentially many GP’s do not know about the developmental issues some of these children and families are experiencing.

• Cost and logistical impact of the service when releasing staff to provide support for the program can be a barrier particularly where sessions are cancelled at the last minute due to illness etc.
Conclusions

• Telecare is an effective method of
  • delivering intervention services to young children and their families and enhancing access to evidenced-based health services for children who are developmentally vulnerable.
  • increasing the professional capacity of the early educators involved to support children developmental vulnerabilities.

• There is a need to build on the evidence to better understand the long term impacts of use of telecare to support children in early education

• PHNs and NGOs have an important role in working more closely with local GP clusters with regards to child development issues
Where to next?

• Continue to deliver these services and build the evidence
• National strategy to reduce childhood developmental vulnerability
• Centre for Children’s Health and Learning - Reach 15,000 children