## Methods and Materials

- Nurses were divided into three groups, one using paper forms, one using electronic forms via laptop and one group using the assessment app via tablet.
- There were 20 measurements from each nurse in each group (n=60 measurements per each method) with self-reported timing of completion of individual forms.
- The evaluation also included:
  - Literature review
  - User Interviews
  - Interviews with technical staff supporting software, hardware and systems.

## Limitations

- It is important to note that there was an urgency to complete this evaluation before the end of the financial year 2013-2014. This was because the results were to support decisions regarding integration of forms and use of mobile devices for community nurses.
- Laptop measurements were only 20 (not the expected 60) due to lack of time (evaluation deadline).
- We did not control the type of patients visited, or for first or follow-up visits and the cases measured reflect the normal case mix of the community nurses.

## Tablet Results

### Patient Advantages vs Nurse Advantages

<table>
<thead>
<tr>
<th>Patient Advantages</th>
<th>Nurse Advantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distraction tool for procedures</td>
<td>Able to refer to other services whilst at the visit</td>
</tr>
<tr>
<td>Education tool – videos and pictures</td>
<td>Translation application to ensure understanding</td>
</tr>
<tr>
<td>Decreased documentation time</td>
<td>Visually explaining anatomy and physiology</td>
</tr>
<tr>
<td>Camera for wound documentation</td>
<td>Internet searches for government initiatives</td>
</tr>
<tr>
<td>Google Maps</td>
<td>Literature supports that mobile technology enhances staff experience and offers improved patient service provision</td>
</tr>
</tbody>
</table>

## Conclusions

- Our findings are consistent with existing published evidence.
- Our evaluation suggests that by using mobile devices the group of community nurses (11.05 FTE) at KFHCN would save, in their assessment of patients, as much as 2,563 nurses hours/year, the equivalent of 1.3 nursing FTE. This equates to 64 working weeks, when working 40 hours per week.

## Recommendations

- Counties Manukau Health should consider the use of mobile devices for community service staff and electronic-supported assessment forms as it offers enriched efficacy and efficiencies for their population.
- Further evaluation is recommended due to the limitations previously outlined.

## References


## Acknowledgements

Kinross Group Limited, New Zealand
Kidz First Home Care Nursing Service

## Contact

Jmckillen@middlemore.co.nz
Kirsty.goodin@middlemore.co.nz
Kerryanne.lote@middlemore.co.nz
Luis.Villa@middlemore.co.nz

---

**EVALUATION OF THE USE OF MOBILE DEVICES AT THE POINT OF CARE**

Kirsty Goodin¹, Kerry-Anne Lote¹, Jackie McKillen¹, Luis Villa²

¹ Specialty Clinical Nurse, Counties Manukau Health, New Zealand, ² Evaluation manager, Ko Awatea, New Zealand

---

**Abstract**

- The Kidz First Home Care Nursing Service (KFHCN) operates 7 days a week and covers a geographical area from Otahuhu to Port Waikato in South Auckland, with 11.05 Specialty Clinical nurse FTE.
- This project stemmed from frustrations with prolonged documentation times and having limited resources at visits.
- A team of nurses developed their own assessment app on a mobile device, with the support of Kinross Group Limited.
- The Evaluation assessed the advantages and disadvantages of using three forms of documentation – Paper, Laptops and Tablets.
- The aim was to prove how mobile technology can enhance the care experience for children, their families and staff by lessening time spent completing documentation.