

**Supplementary material****Annex A. User groups consulted for software development**

User groups	Use cases
1. Patient	<ul style="list-style-type: none"><li>• Provide feedback</li></ul>
2. Service provider	
Administrator (includes nursing leads)	<ul style="list-style-type: none"><li>• Register patient</li><li>• Publish task for bidding</li><li>• Manual intervention</li><li>• Follow up with patient</li></ul>
Nurse	<ul style="list-style-type: none"><li>• Register with programme</li><li>• Bid for task</li><li>• Coordinate service delivery</li><li>• Deliver service</li><li>• Document care</li></ul>
Business office	<ul style="list-style-type: none"><li>• Receive patient's acknowledgement</li><li>• Generate billing invoice</li><li>• Generate receipt</li></ul>
Human Resource	<ul style="list-style-type: none"><li>• Receive nurse's reimbursement form</li><li>• Validate reimbursement</li><li>• Payroll process</li></ul>

## Annex B. Outcome and process measures for Match-A-Nurse programme

Quadruple Aim		Match-A-Nurse Programme		
Dimension	Outcome measures	Outcome measured (in detail)	Process measures	Data source
<b>Patient experience of care</b>	<ul style="list-style-type: none"> <li>• Patient surveys i.e. likelihood to recommend</li> </ul>	<ul style="list-style-type: none"> <li>• Patient survey i.e. likelihood to recommend</li> <li>• Number of patients who cancelled the service/ withdrew from the programme</li> <li>• Number of 'no shows' (nurses)</li> <li>• Number of 'no shows' (patients)</li> <li>• Number of eventful documentation</li> <li>• Individual documentation completion rate</li> <li>• Individual patient cancellation rate</li> </ul>	<ul style="list-style-type: none"> <li>• Satisfaction rating</li> <li>• Patient feedback</li> <li>• Completion rate</li> </ul>	<ul style="list-style-type: none"> <li>• Patient satisfaction survey</li> </ul>
<b>Per capita cost of healthcare</b>	<ul style="list-style-type: none"> <li>• Total cost per member of the population per month (cost effectiveness)</li> </ul>	<ul style="list-style-type: none"> <li>• Direct cost of Match-A-Nurse service</li> <li>• Savings – in comparison with existing services in the community (collaborate with HNF)</li> <li>• Decrease in A&amp;E admissions</li> <li>• Average travel distance</li> <li>• Number of patients with valid means test</li> </ul>	<ul style="list-style-type: none"> <li>• HNF</li> <li>• e-Hint</li> <li>• Web portal</li> </ul>	
<b>Population health</b>	Health outcome <ul style="list-style-type: none"> <li>• Service completion rate</li> <li>• Job quality</li> </ul>	<ul style="list-style-type: none"> <li>• Number of completed visits</li> <li>• Complete documentation</li> </ul>	<ul style="list-style-type: none"> <li>• Number of tasks with poor matching</li> <li>• Number of tasks with no</li> </ul>	<ul style="list-style-type: none"> <li>• Web portal</li> <li>• Mobile application</li> </ul>

Quadruple Aim		Match-A-Nurse Programme		
Dimension	Outcome measures	Outcome measured (in detail)	Process measures	Data source
	(eventful/uneventful)	rate	bids <ul style="list-style-type: none"> <li>Number of tasks requiring manual intervention</li> </ul>	
<b>Work life of health care providers i.e. nurses</b>	<ul style="list-style-type: none"> <li>Nurses' satisfaction</li> <li>Why do nurses sign up? (qualitative)</li> </ul>	<ul style="list-style-type: none"> <li>Provider satisfaction survey</li> </ul>	<ul style="list-style-type: none"> <li>Number of enrolled nurses interviewed</li> <li>Satisfaction rating</li> </ul>	<ul style="list-style-type: none"> <li>Provider satisfaction survey</li> </ul>
<b>Home nursing capacity</b>	<ul style="list-style-type: none"> <li>Number of nurses who signed up</li> <li>Number of nurses who bid for the task</li> <li>Number of tasks available</li> <li>Capacity of nurses provided by each institution</li> </ul>	<ul style="list-style-type: none"> <li>Number of patients/ caregivers who signed up for the service</li> <li>Number of nurses recruited</li> <li>Average duration required to match nurses to patients</li> <li>Individual bid rate</li> <li>Nurse's cancellation rate</li> <li>Nurse's Performance</li> </ul>	<ul style="list-style-type: none"> <li>Average number of visits completed by each nurse</li> <li>Average number of visits per patient per month</li> <li>Number of active nurse users</li> </ul>	<ul style="list-style-type: none"> <li>Web portal</li> <li>Mobile application</li> </ul>
<b>Others</b>	<ul style="list-style-type: none"> <li>Usability of web portal/ mobile application</li> </ul>	<ul style="list-style-type: none"> <li>Application satisfaction rating</li> </ul>	<ul style="list-style-type: none"> <li>Application functionality</li> <li>Average duration of downtime</li> </ul>	<ul style="list-style-type: none"> <li>Web portal</li> <li>Mobile application</li> </ul>