

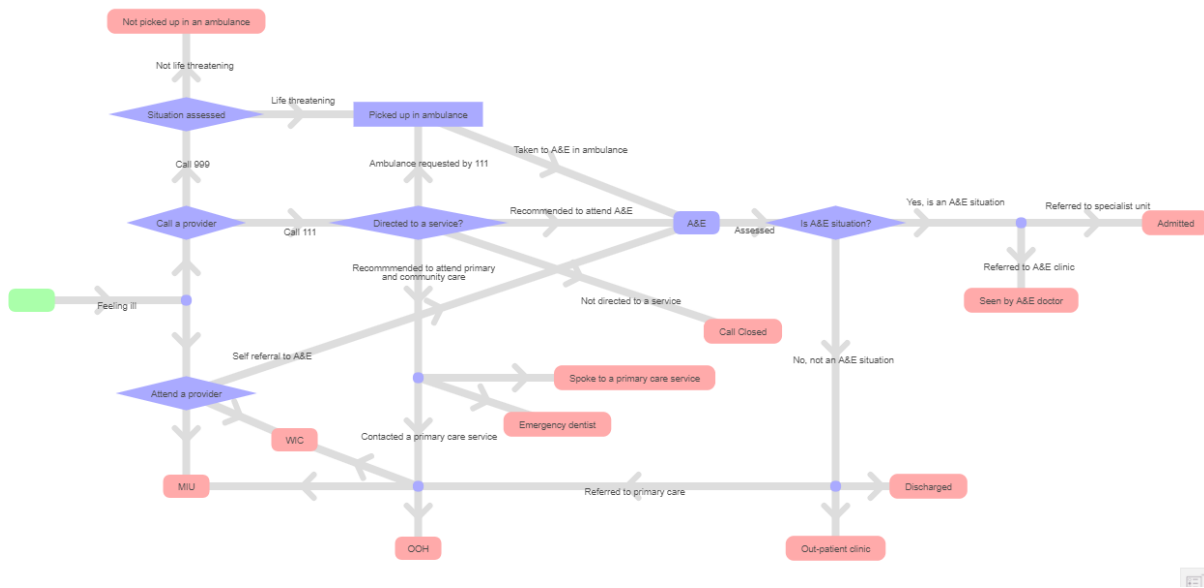
NETIMIS

REFERENCE DOCUMENT

Client: Leeds North CCG

Pathway: Urgent Care System (Current State Pathway)

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Online at: <https://www.netimis.co.uk/shared/5982d62afe17360c17cb413c>

Brief

In collaboration with X-Lab and Leeds North Clinical Commissioning Group (CCG), the model above has been created to represent and simulate the current state process within the Urgent Care System in Leeds. The results of the simulation will be used to show a comparison of both the current Urgent Care System and proposed Urgent Care Hub. This document provides detail of the settings specified in the NETIMIS model such as capacity, time, cost and probability.

Client

Leeds North CCG work together with patients, communities and GP practices within the Leeds region to ensure that the right services are in place to support patients and help improve their wellbeing. The group operates as one of three CCGs covering Leeds, led by General Practitioners (GPs) and nurses, covering approximate 300,000 of the population. In conjunction with NHS' Five Year Forward View, NHS North CCG aims to restructure the Urgent Care System across Leeds to allow better integration and implementation between providers.

Model

This model represents the current state process within the Urgent Care System and provides a base line for evaluating various redesign proposals.

Overall Model Settings	
Population Size: 500	Estimation of patient admittance.
Time Unit: Minutes (min)	Rationale: most appropriate time unit
Costs: Various assessment service bands	Based on cost assumptions discussed and agreed by client

Patient Field Settings					
Gender		Age		Condition	
Female	46.57%	0-4	9.32%	Unknown	53.57%
Male	53.43%	5-19	12.46%	Dislocation/ fracture/ joint injury/ amputation	9.74%
		20-64	53.71%	Respiratory conditions	9.57%
		65+	24.51%	Central Nervous System conditions	6.63%
				Cardiac conditions	6.55%
				Collapse	4.84%
				Falls	4.74%
				Gastrointestinal conditions	4.36%

Pathway Settings				
Activity	Time (min)	Cost	Probability	C.I.*
Feeling ill			Call a provider – 50% Attend a provider – 50%	2

Direct Call Settings												
Activity	Time (min)	Cost	Probability						C.I.*			
Call a provider			Call 999 – 50% Call 111 – 50%						3			
Call 999		£7	Assess situation						4			
Situation assessed			(%)	Conditions						5		
				Unknown	D/F/J/A	Resp.	CNC	Cardiac	Collapse		Falls	Gastro.
			Not L.T.*	17.34	50	18.06	22.22	22.79	28.84		29.9	58.7
L.T.*	82.66	50	81.94	77.78	77.21	71.16	70.1	41.3				
L.T.* – life threatening												
Not life threatening		£47	Not picked up in an ambulance						4			

Life threatening	8	£230	Picked up in an ambulance	4																																													
Call 111		£9.13	Directed to a service?	4																																													
Directed to a service?			Ambulance requested by 111 – 20% Recommend to attend A&E – 20% Not directed to a service – 20% Recommend to attend primary and community care – 40%	3																																													
Ambulance requested by 111	8	£20	Picked up in ambulance	4																																													
Recommend to attend A&E		£87	A&E	4																																													
Not directed to a service			Call closed	5																																													
Recommended to attend primary and community care		£45	Spoke to a primary care service – 33.33% Emergency dentist – 33.33% Contact a primary care service – 33.33%	3																																													
Contacted a primary care service			<table border="1"> <thead> <tr> <th>(%)</th> <th colspan="8">Conditions</th> </tr> <tr> <th></th> <th>Unknown</th> <th>D/F/J/A</th> <th>Resp.</th> <th>CNC</th> <th>Cardiac</th> <th>Collapse</th> <th>Falls</th> <th>Gastro.</th> </tr> </thead> <tbody> <tr> <td>WIC*</td> <td>21.3</td> <td>1.37</td> <td>45.45</td> <td>46.75</td> <td>48.17</td> <td>33.33</td> <td>33.33</td> <td>47.62</td> </tr> <tr> <td>MIU*</td> <td>57.3</td> <td>97.26</td> <td>9.09</td> <td>6.5</td> <td>3.67</td> <td>33.33</td> <td>33.33</td> <td>4.76</td> </tr> <tr> <td>OOH*</td> <td>21.4</td> <td>1.37</td> <td>45.46</td> <td>46.75</td> <td>48.16</td> <td>33.33</td> <td>33.33</td> <td>47.62</td> </tr> </tbody> </table> <p>WIC* - Walk-in centre MIU* - Minor injuries unit OOH* - Out-of-hours</p>	(%)	Conditions									Unknown	D/F/J/A	Resp.	CNC	Cardiac	Collapse	Falls	Gastro.	WIC*	21.3	1.37	45.45	46.75	48.17	33.33	33.33	47.62	MIU*	57.3	97.26	9.09	6.5	3.67	33.33	33.33	4.76	OOH*	21.4	1.37	45.46	46.75	48.16	33.33	33.33	47.62	5
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			AE*	3.95	6.84	0.22	0.1	0.26	50	50	0.11	
			SU* - Specialist unit AE* - A&E clinic									
Referred to specialist unit		£520	Admitted									4
Referred to A&E clinic	60	£41	Seen by A&E doctor									4
IF No			(%)	Conditions								5
				Unkno wn	D/F/J/ A	Resp.	CNC	Cardiac	Collap se	Falls	Gastro .	
			Dis*	87.84	39.34	97.67	91.44	94.96	33.33	33.33	97.06	
			OP*	5.12	9.9	1.79	7.33	3.95	33.33	33.33	2.09	
			PC*	7.04	50.76	0.54	1.23	1.09	33.33	33.33	0.85	
Dis* - Discharged OP* - Out-patient clinic PC* - Refer to primary care												
Referred to primary care			(%)	Conditions								5
				Unkno wn	D/F/J/ A	Resp.	CNC	Cardiac	Collap se	Falls	Gastro .	
			WIC*	21.3	1.37	45.45	46.75	48.17	33.33	33.33	47.62	
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WIC* - Walk-in centre MIU* - Minor injuries unit OOH* - Out-of-hours												

Direct Attend Settings												
Activity	Time (min)	Cost (£)	Probability									C.I.*
Attend a provider			(%)	Conditions								5
				Unkno wn	D/F/J/ A	Resp.	CNC	Cardiac	Collap se	Falls	Gastro .	
			SR*	91.7	40.45	80.47	70.43	62.23	0	0	85.49	
			WIC*	3.7	8.45	19.23	29.46	37.62	99.84	99.92	14.46	
			MIU*	4.6	51.1	0.3	0.11	0.15	0.16	0.08	0.05	
SR* - Self referral to A&E WIC* - Walk-in centre MIU* - Minor injuries unit												
Self-referral to A&E		87	A&E									4
A&E		86	Assessed – to see if it is an A&E situation									4

Is A&E situation?			(%)	Conditions						5		
			Unknown	D/F/J/A	Resp.	CNC	Cardiac	Collapse	Falls		Gastro.	
			Yes*	83.92	46.4	98.34	93.43	96.33	50		50	96.93
			No*	16.08	53.6	1.66	6.57	3.67	50		50	3.07
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IF Yes, refer to			(%)	Conditions						5		
			Unknown	D/F/J/A	Resp.	CNC	Cardiac	Collapse	Falls		Gastro.	
			SU*	96.05	93.16	99.78	99.9	99.74	50		50	99.89
			AE*	3.95	6.84	0.22	0.1	0.26	50		50	0.11
SU* - Specialist unit AE* - A&E clinic												
Referred to specialist unit		520	Admitted						4			
Referred to A&E clinic	60	41	Seen by A&E doctor						4			
IF No			(%)	Conditions						5		
			Unkno wn	D/F/J/ A	Resp.	CNC	Cardiac	Collap se	Falls		Gastro .	
			Dis*	87.84	39.34	97.67	91.44	94.96	33.33		33.33	97.06
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WIC* - Walk-in centre MIU* - Minor injuries unit OOH* - Out-of-hours												

* C.I. is a Confidence Indicator for confidence in the evidence base used to construct the model based on a score of 1-5 with 5 being highest (0=No confidence/ not applicable; 1=Guess by Modeller; 2=Estimate from Domain Expert; 3=Empirical evidence for direct observation/ Extrapolation from published literature; 4=Multiple reliable sources; 5=Confirmed through Expert Review Board).