OLHN Reconfiguration – Phase 1 Extended ambulance by-pass: Briefing Note

1 Summary / Key Messages

- Phase 1 of the OLHN Reconfiguration i.e. the ambulance by-pass protocol change from the week of 12th December proceeded at 8am on Wednesday 14th December (14th rather than 12th due to the ambulance strike in Northern Ireland on 12th).

- While it is very early days, at 8am on Thursday 15th December (24 hours after the change to the protocol), OLOL Drogheda reported 3 patients waiting for admission (TrolleyGAR rating Green, 3 being 25% of the Red threshold of 12), with 0 patients reported as waiting over 24 hours for admission.

- This important patient safety improvement has consumed a significant and, some may argue, possibly disproportionate amount of senior management time and attention at local, regional and national level since the last board meeting.

- It is respectfully suggested that there are significant lessons to be learned, for both internal and external stakeholders, in how essential change of this nature, which is complex enough, can become overly become overly challenging unless the formal operational and clinical governance lines are fully utilised and respected.

- It remains the view of the executive that the full reconfiguration proposed for OLHN is in line with government policy, is necessary from a patient safety perspective and needs to proceed as soon as it is practical to do so.

- The executive fully respects that the minister in his letter of 24th November, while supporting the ambulance bypass protocol, raised a number of queries in respect of the wider reconfiguration and made clear that it did not have his support at that time.

- A response to the Minister, addressing each of the queries, is being drafted with a view to it being issued in advance of year end, and noting the experience on the ground since the change made on the 14th December. It is felt to be important to be able to incorporate a summary of that experience in any reply.

- If it suits the Board, the executive can draft a briefing note / reply for the Board to the Ministers email of the 9th of December. Much of same would likely revolve around the lessons learned referenced above.

2 Context

Securing the Future of Smaller Hospitals: A Framework for Development, published in 2013, defines the role of the smaller Model 2 hospitals. It outlines in detail the wide range of services that can be provided within smaller hospitals. Our Lady's Hospital Navan was identified as a hospital to be reconfigured to a Model 2 hospital, with several additional investments to be made in the region. The HSE has a reconfiguration plan to support the project, with many of the steps already implemented.

In June 2022, the Minister for Health wrote to the Board of the HSE requesting a review of several key items prior to the reconfiguration of Our Lady's Navan Emergency Department to a Medical Assessment Unit (MAU) and the transfer of ICU capacity to Our Lady of Lourdes, Drogheda.

The National Clinical Lead for Acute Hospitals Dr Mike O'Connor and the then National Director for Acute Operations Liam Woods were requested to lead a process to provide assurance in relation to the planned reconfiguration of services at Our Lady's Hospital Navan and to ensure that patient safety and quality assurance are central to any agreed changes.

The conclusion of this review in October 2022 was a recommendation to proceed with the reconfiguration of OLHN to a Model 2 hospital based on the reconfiguration plan that has been put forward by the Working Group to provide patients with the highest quality, safest service.

A phased approach to implementation was proposed by the Working Group and the HSE Board to the Department of Health with phase 1 being extended ambulance by-pass for the most critically unwell patients.

On November 24th the Minister for Health wrote to the HSE Board and supported an extended ambulance by-pass for OLHN for critically ill patients only. The Minister did not support the full reconfiguration of OLHN to a Model 2 hospital including the reconfiguration of the ED and stated that the reconfiguration review remains under consideration.

3 Extended ambulance by-pass

Prior to the week of 12th December there was a protocol in place whereby ambulances carrying paediatric patients, obstetrics patients, major trauma patients, STEMI care (heart attack) patients and stroke care patients were not brought by emergency ambulance to Navan, but rather were brought to the nearest hospital that can provide care appropriate to their needs.

There is now, since 8am on Wednesday 14tth December, an extension to this protocol whereby ambulances carrying critically ill patients are by-passing Our Lady's Hospital, Navan and bring the patients to a more appropriate hospital. All other patients will continue to attend OLHN ED.

The Appendix shows the 2022 activity in OLHN ED where there is projected to be 21,600 new attendances to the ED in OLHN, 14% of these attendances are ambulance attendances (c. 3,024). Patients who are critically or seriously unwell or likely to deteriorate account for about 50% of these ambulance attendances (c. 1,512).

This represents an additional 4-5 patients per day being conveyed by ambulance to an alternative hospital to OLHN. Analysis was completed on the hospital most likely to receive ambulance attendances from OLHN catchment based on patients' home address. This concluded that 83% would be redistributed to OLOL. Over 90% of the current ED attendances to OLHN will continue to attend OLHN.

4 Timeline for implementation

December 12th was identified as the earliest possible date of go-live for the extended ambulance by-pass based on having the critical requirements identified above in place and sufficient time for communications. However due a strike in Norther Ireland of ambulance personnel on that date the go-live was pushed back to 8am on December 14th to ensure there was no impact of this strike.

Extended ambulance by-pass has now been implemented and is being actively monitored. While it is very early days, at 8am on Thursday 15th December (24 hours after the change to the protocol), OLOL Drogheda reported 3 patients waiting for admission (TrolleyGAR rating Green, 3 being 25% of the red threshold of 12), with 0 patients reported as waiting over 24 hours for admission.

5 Requirements in place to support ambulance by-pass

In order to safely implement the ambulance by-pass protocol several critical requirements have been identified as outlined below. The status of each is provided

5.1 Pre-hospital requirements

The required investments for NAS are in place including an additional emergency ambulance 24/7 - including advanced paramedic staffing - which required 11.2 WTE and 1 additional intermediate care vehicle to support repatriation and discharge planning for patients from the Navan catchment area from other hospitals such as OLOL.

A clinical directive has been developed and communicated to NAS staff in preparation for the implementation on December 14th. OLOL raised concerns regarding the initial ambulance by-pass directive based on it being more than what had been agreed. Subsequently, this was reviewed by the Clinical Directors and site managers from OLOL and OLHN, along with the Clinical Director for NAS, the head of NAS and Dr Mike O'Connor, to ensure that any possible misinterpretations were addressed. The final ambulance bypass protocol detail was signed off by this group and is expected to lead to less than the expected average 4-5 patients per day (1,512 mentioned above) bypassing OLHN.

5.2 Inpatient bed requirements

The methodology to calculate the total inpatient bed required for the full reconfiguration of OLHN to a Model 2 hospital is in the Appendix 5.2. This has not received ministerial support for implementation. Based on this methodology it was estimated that between 16 to 34 inpatient beds would be required in OLOL as well as replacement of the 2 ICU beds in OLHN.

Appendix 5.3 sets out the inpatient bed requirements for the extended ambulance by-pass which has received ministerial support. Based on this analysis it is estimated that a total additional bed complement of 14.4 inpatient beds would be required (see Appendix for more detail). This bed complement includes the ICU requirement which is estimated at 1 bed or less to meet the demand.

The total bed complement of 32 beds identified as being required for full reconfiguration will be put in place to support the extended ambulance by-pass despite the projections indicating that circa 14 beds will be required. To date, 26 beds have been put in place including 14 ring fenced beds in OLHN and 10 additional inpatient beds in OLOL and 2 additional ICU beds in OLOL. An additional 6 ring fenced beds will be put in place in OLHN by week commencing 19th December bringing the total bed complement up to 32.

5.3 OLHN infrastructure & staffing

A Total of 62 inpatient beds and 24 rehabilitation beds staffed and available to support admissions through the ED, MAU, and repatriation from OLOL for clinically suitable patients. As part of this overall bed

complement there will be 20 ring fenced beds in OLHN available at any one time to support the repatriation of patients back from OLOL.

A senior ADON is in place to manage transfers from OLOL, and a dedicated phone line is in place. A Geriatrician/Rehab Consultant for OLHN Rehab Beds is currently being recruited to facilitate patient flow between both hospitals. A locum is in place currently covering this role.

5.4 Capacity in OLOL

10 additional inpatient beds in OLOL are available in response to increasing demand because of ambulance by-pass. Two additional ICU beds in OLOL are also available in response to increasing demand as a result of ambulance by-pass.

5.5 Engagement & Communications:

A communications and stakeholder engagement plan was developed to support ambulance by-pass. Prior to implementing the formal communications plan there were leaks in the media, and on November 29th communications from the hospitals were expedited to staff to ensure they didn't hear from mainstream media. Any uncertainty in the messaging of this staff communication was clarified by HSE and the implementation group.

On December 2nd the consultants from OLOL (following a recent ministerial visit to engage with them) wrote a letter to the Minister raising concerns regarding patient safety in OLOL as a result of the ambulance by-pass. Subsequently on December 6th the consultants in Mullingar wrote a similar letter to the Minister raising concerns regarding patient safety in Regional Hospital Mullingar (RHM).

The IEHG met with the Consultants and General Manager of the Regional Hospital Mullingar in relation to the correspondence that issued to the Minister for Health expressing their concerns around the enhanced ambulance bypass protocol for Our Lady's Hospital Navan. The Consultants expressed their view and concerns that the ED at RHM could experience significant impact as a result of the proposed enhanced ambulance bypass protocol and resources should be allocated to RHM to deal with any impact. The IEHG clarified the projected small increase in ambulances (circa 2 per week at RHM). It also clarified that significant Resources have been allocated to RHM to alleviate pressures on their hospital. IEHG agreed to monitor the impact once the bypass has commenced and to continue our engagement in the coming months to deal with any issues that may arise.

The OLOL Clinical Director met with the consultants in OLOL to address their concerns.

The Minister for Health wrote to the HSE on December 9th raising these issues to the Board. If it suits the Board the executive can provide a draft response.

5.6 Implementation & Monitoring:

An implementation Working Group has been established to include Hospital Group CEOs, Hospital Clinical Directors, Hospital Managers and the NAS, chaired by Acute Operations. This Group meets daily to provide a report on ED attendances, ambulance conveyances, inpatient admissions, bed availability and transfers back from OLOL to OLHN. The data arising from this meeting is being tracked and monitored to ensure that any issues can be quickly identified and addressed.

The letter from the Minister supporting the extended ambulance by-pass but not the full reconfiguration remains under consideration by the HSE, and a response will be prepared in due course which will incorporate the learnings from the extended ambulance by-pass implementation. It is expected that this will issue next week.

5. Appendix

5.7 Overview of current OLHN activity

OUR LADY'S HOSPITAL NAVAN: UNSCHEDULED CARE ACTIVITY OVERIVEW

In 2019, there was a total of 24,672 ED attendances (including 3,200 MAU presentations) with 87% of these being new attendances. For the first 6 months of 2022, the total ED attendances were 12,900, assuming this rate of attendances remains for the full year the attendances are projected to be 25,800. An estimated 84% of these will be new attendances – total of 21,600.

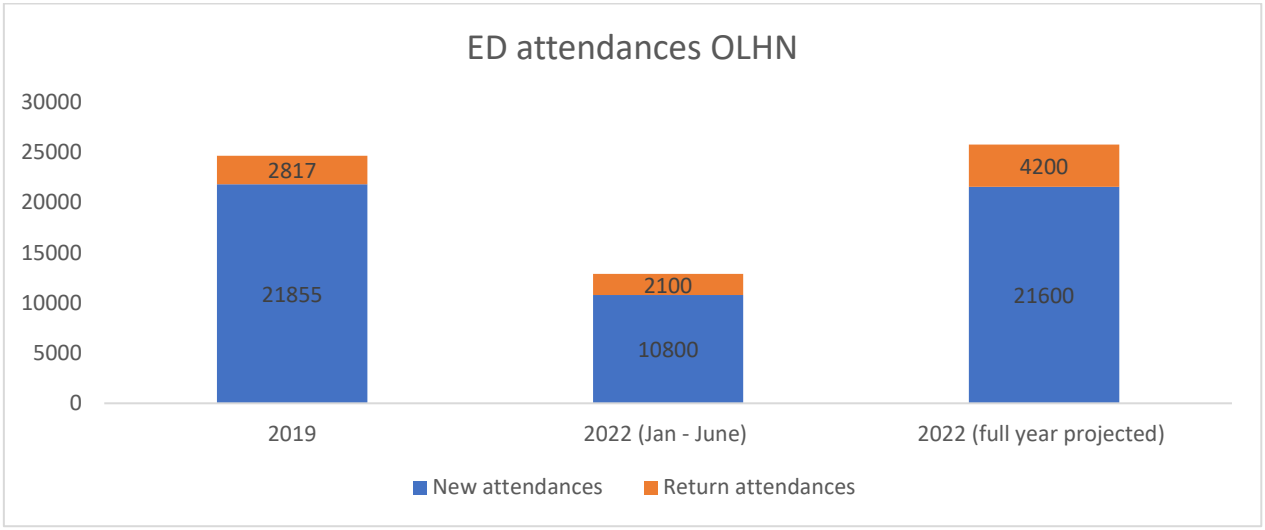

Figure 1: olhn ED attendances 2019 & projected 2022

The majority of attendances are to the Local Injury Unit (46%) while a further 16% of attendances are surgical and 38% are medical.

2019 Attendances (New)

2019 New Attendances		
Treatment Type	New Attendances by Category OLHN (Existing 2019)	% split of New Attendances OLHN (Existing 2019)
Surgical	2,985	16%
Local Injury Unit	8,588	46%
Medical	7,082	38%
Total	18,655	100%
% of Total	100%	

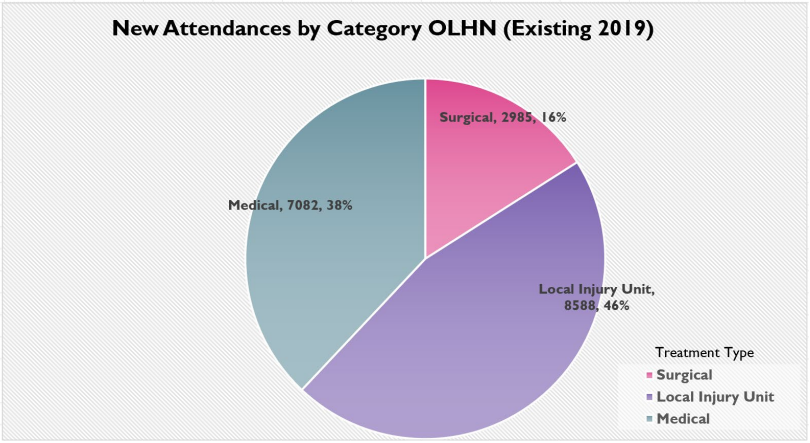

Figure 2: olhn attendances by category (2019)

2022 inpatient admissions

Between January and June 2022 there was a total of 1,659 emergency medical admissions which is projected to be 3,318 for the full year. This equates to just over 9 patients per day. The ALOS for these admissions was 6.4 days with a total of 21,308 inpatient bed days projected for the full year. Based on this there would be a requirement for 67 inpatient beds at an 85% occupancy rate. These admissions include ICU, HDU and CCU admissions. There is a total of 62 inpatient beds including CCU, 2 ICU and 2 HDU equating to 66 beds currently to meet this demand. There is also a total of 24 rehabilitation beds.

	2022 (Jan - June)	2022 (projected full year)
Admissions	1,659	3,318
Emergency Medical Admissions per day	9.2	9.1
ALOS	6.4	6.4
Bed nights	10,654	21,308
Beds (at 85% occupancy)		67

Table 1: Actual emergency medical admissions in OLHN Jan – June 2022

5.8 Overview of the key changes as a result of reconfiguration

This section provides a summary overview of the main changes in OLHN following full reconfiguration to a Model 2 hospital; the projected activity in OLHN and OLOL; and the capacity projected to be required to meet this demand. It should be noted that the full reconfiguration has not received ministerial support and this methodology is included only by way of reference to the overall requirements. This analysis was completed as part of the review of the reconfiguration with input and sign-off from the National working group which included hospital group CEOs, National Clinical Leads and Hospital Group Clinical Directors.

1. **Projected attendances in OLHN (MAU / LIU) and OLOL (ED)**

As described in the introduction, in 2022 there is projected to be 21,600 new attendances to the ED in OLHN. These are split into Surgical attendances making up 16% of total attendances (3,456); LIU making up 46% of attendances (9,936); and medical attendances making up 38% of total attendances (8,208). OLHN will retain an LIU and MAU post-reconfiguration meaning the 9,936 attendances to the LIU will remain in OLHN. All surgical attendances at the ED in OLHN would now transfer to OLOL, a total of 3,456 attendances.

Medical attendances will be split across the MAU in OLHN and the ED in OLOL for patients who are not suitable to attend the MAU. Based on the analysis of the attendances at the ED in OLHN currently, 90% of the medical attendances would be clinically suitable for an MAU while the remaining 10% of attendances who are critically ill and would not be suitable for an MAU. However, given there is a high rate of self-referral to the ED we have completed scenario modelling for the medical attendances to provide a range of attendances to both the MAU in OLHN and the ED in OLOL. To determine this range an analysis was completed of the attendances to the other Model 2 hospital LIUs per head of population. For the purposes of this analysis two scenarios are put forward.

In summary the scenarios consider the likely patient movement to OLOL, and other sites based upon current clinical presentations (Scenario 1) and the possibility of a more significant movement of patients beyond what would be clinically required (Scenario 2). There is no growth in the total caseloads associated with the reconfiguration of services between OLOL and OLHN and there will be an increase in the total bed complement through the additional beds in OLOL. The requirement to ensure safer services for patients in the region is to manage the acute medical patients across the two sites under a single clinical governance. This will ensure that the available capacity is used optimally to support patients at both sites and that the additional investment is used effectively. Effective patient movement across sites will minimise any risk of increased Patient Experience Time (PET) or trolley numbers in either site.

Scenario 1: based on the analysis completed of ED attendances to OLHN ED, this scenario assumes that all clinically suitable patients remain in OLHN (90% of the 8208) and the other 10% are treated in the ED in OLOL.

Projected attendances in OLHN (MAU / LIU) and OLOL (ED)			
Attendance Type	**"As is" 2022 projection**	**OLHN Post-Reconfiguration**	**Moves to OLOL**
Surgical	3,456	-	3,456
LIU	9,936	9,936	-
Medical	8,208	7,387	821
Total	**21,600**	**17,323**	**4,277**

Table 2: PROJECTED attendances at OLHN (LIU / MAU) and OLOL (ED) based on scenario 1

In this scenario, there is a total of 17,323 attendances at the LIU and MAU in OLHN and there is a total of 4,277 additional attendances at the ED in OLOL, the equivalent of 12 patients per day.
Scenario 2: based on the average attendances to other Model 2 hospital MAUs per head of population and applying this to the catchment population for OLHN.

Projected attendances in OLHN (MAU / LIU) and OLOL (ED)			
Attendance Type	"As is" 2022 projection	OLHN Post-Reconfiguration	Moves to OLOL
Surgical	3,456	-	3,456
LIU	9,936	9,936	-
Medical	8,208	5,898	2,310
Total	21,600	15,834	5,766

Table 3: PROJECTED attendances at OLHN (LIU / MAU) and OLOL (ED) based on scenario 2

In this scenario, there is a total of 15,834 attendances at the LIU and MAU in OLHN and there is a total of 5,766 additional attendances at the ED in OLOL, the equivalent of 16 patients per day. It should be noted that the other MAUs are not open 24/7 as is proposed for the MAU in OLHN, however, given the relatively low ED attendances out of hours this benchmark was applied to be conservative.

2. Projected admissions and beds required

All surgical admissions go to OLOL for treatment currently. The uplift in admissions and inpatient capacity in OLOL is based on the new medical attendances. In order to determine the projected inpatient admissions and bed requirements across the two sites we first looked at the actual inpatient admissions and bed nights for emergency medical admissions in 2022. As shown in the table below there was a total of 1,659 emergency medical admissions to OLHN in the first 6 months of 2022, an average of 9.2 patients per day. It is projected that for the full year a total of 67 inpatient beds would be required to meet this demand at an occupancy rate of 85% This includes admissions to the CCU and the ICU. There is a total of 62 inpatient beds including CCU, 2 ICU and 2 HDU equating to 66 beds currently to meet this demand. There is also a total of 24 rehabilitation beds in OLHN.

	2022 (Jan - June)	2022 (projected full year)
Admissions	1,659	3,318
Emergency Medical Admissions per day	9.2	9.1
ALOS	6.4	6.4
Bed nights	10,654	21,308
Beds (@ 85% occupancy)		**67**

Table 4: Actual emergency medical admissions in OLHN Jan – June 2022

Considering the total admissions projected for 2022 and based on the projected attendances at the ED and MAU in each of the above scenarios, two scenarios for the inpatient bed requirements were calculated.

Scenario 1: based on a 90:10 split in medical attendances to OLHN and OLOL

Admission Type	Admission Rate	ALOS	Projected Admissions & Bed Admissions	Medical Beds Required OLHN	Medical Beds Required OLOL
Surgical	N/A	-	-	-	
LIU	0%	-	-	-	
Medical (MAU)	34%	6	2,512	47	
Medical (non-MAU)	100%	6	821		16*

** this requirement includes 2 CCU beds for cardiology admissions requiring cardiac monitoring*

Table 5: PROJECTED admissions to inpatient medical beds at OLHN and OLOL based on scenario 1

In order to determine the bed requirements as a result of this reconfigured activity the following was assumed:

- All surgical admissions currently go to OLOL therefore no additional bed requirement
- 100% admission rate of the 10% critically ill not suitable for an MAU based on the clinical consensus from OLHN on the acuity of these patients. This equates to 821 patients pa.
- 34% admission rate from the MAU was assumed in order to ensure the total admissions equate to the total admissions described in Table 1
- 6-day ALOS used for medical admissions from MAU based on OECD average.
- These assumptions equate to a total of 3,333 admissions pa in line with the actual admission numbers to OLHN in 2022.

Based on these assumptions, the total projected bed requirements are 47 medical inpatient beds in OLHN and 16 medical inpatient beds in OLOL. There is currently a total of 62 inpatient medical beds available in OLHN as well as 24 rehabilitation beds.

In this scenario, in order to ensure there is no increase in inpatient bed nights beyond the 10 additional beds that can be provided it is estimated that 2 patient transfers back to OLHN per day would be required with each transfer having an ALOS of 2 days in OLHN.

Scenario 2: based on a 72:28 split in medical attendances to OLHN and OLOL

Admission Type	Admission Rate	Projected Admissions & Bed ALOS	Admissions	Medical Beds Required OLHN	Medical Beds Required OLOL
Surgical	N/A	-		-	
LIU	0%	-		-	
Medical (MAU)	34%	6	2005	38	
Medical (non-MAU)	79%	6	1819		34*

** this requirement includes 2 CCU beds for cardiology admissions requiring cardiac monitoring*

Table 6: PROJECTED admissions to inpatient medical beds at OLHN and OLOL based on scenario 2

In order to determine the bed requirements as a result of this reconfigured activity the following was assumed:

- All surgical admissions currently go to OLOL therefore no additional bed requirement
- 100% admission rate the 10% critically ill not suitable for an MAU based on the clinical consensus from OLHN on the acuity of these patients for the other patients attending OLOL in this scenario a 67% admission rate has been applied based on the average admission rate for medical patients in triage categories 1,2& 3. This equates to a 79% admission rate for the 2,310 medical patients attending the ED.
- 34% admission rate from the MAU was assumed in order to ensure the total admissions equate to the total admissions described in Table 1
- 6-day ALOS used for medical admissions from MAU based on OECD average.
- These assumptions equate to a total of 3,824 admissions pa which is higher than the actual admission numbers to OLHN in 2022.

Based on these assumptions, the total projected bed requirements are 38 medical inpatient beds in OLHN and 34 medical inpatient beds in OLOL. There is currently a total of 62 inpatient medical beds available in OLHN as well as 24 rehabilitation beds. It should be noted that the other MAUs are not open 24/7 as is proposed for the MAU in OLHN, however, given the relatively low ED attendances out of hours this benchmark was applied in order to be conservative.

In this scenario, in order to ensure there is no increase in inpatient bed nights beyond the 10 additional beds that can be provided it is estimated that 8 patient transfers back to OLHN per day would be required with each transfer having an ALOS of 3 days in OLHN.

APPENDIX

Pages:	Description	Date
1	Memo from Anita Brennan, Hospital Manager, OLHN to All Staff at OLHN	29 November 2022
2 - 3	Letter from OLHN Consultants to Minister Donnelly	01 December 2022
4 – 6	Letter from Mullingar Midland Regional Hospital Consultants to Minister Donnelly	06 December 2022
7 - 8	Letter from HSE CCO (Damien McCallion) to Declan Lyons, Ian Carter and Robert Morton	08 December 2022
9 - 17	Ambulance By Pass Circular	08 December 2022

29/11/2022

MEMORANDUM

To: All Staff at OLHN
Re: Transformation and Reconfiguration OLHN

Dear Colleague,

For some time now there has been discussion at Senior HSE Level, Department of Health and Hospital Groups (RCSI and IEHG) level relating to the transformation and reconfiguration of Emergency and Intensive Care services at Our Lady's Hospital Navan (OLHN).

You will be aware that OLHN is currently bypassed for stroke, trauma, cardiac arrest, paediatrics and obstetrics. I can now confirm that the Minister for Health, Mr Stephen Donnelly T.D., has written to the Board of the HSE indicating that Phase 1 of OLHN transformation should take place from 12th December 2022. This means that from this date, unstable and critically ill patients (including abdominal pains) will no longer be brought to OLHN's Emergency Department (ED) by ambulance. Those patients will instead be brought to an appropriate level 3 or 4 hospital where they will be provided with the best chance of survival. Please note that this decision represents a partial bypass of ambulances to OLHN. The National Ambulance Service will continue to bring patients who are less sick and who do not meet critically ill status to the OLHN ED.

Minister Donnelly has not yet sanctioned Phase 2 Transformation which will see the ED at OLHN reconfigured to a 24 hour Medical Assessment Unit (MAU). A date for Phase 2 has yet to be confirmed. That said; over the next number of weeks staff representatives from all disciplines will be involved in user group engagement. It is at this level that staff will input/discuss what operational policies, procedures and routine changes may or may not affect staff of the Hospital post transformation.

As per my previous correspondence I would like to remind you that once reconfiguration takes place the Hospital will be treating more patients, not fewer and in a safer environment. It is important to convey to you that no employed staff members will lose their jobs and there will be no involuntary redeployment of staff to other hospitals or healthcare organisations. There will be no outsourcing of services. I will update all staff on developments as they arise and as new information becomes available. In the meantime if you have further questions regarding this process you should speak with your line manager.

Yours sincerely

_____
Anita Brennan
Hospital Manager, Our Lady's Hospital Navan

Mr. Stephen Donnelly,

Minister for Health,

50-58, Block 1,

Miesian Plaza,

Baggot Street Lower,

Dublin 2,

D02 XW14.

1st December 2022

RE: RECONFIGURATION OF THE EMERGENCY DEPARTMENT, OUR LADY'S HOSPITAL, NAVAN

Dear Minister,

The consultant body of Our Lady of Lourdes Hospital, Drogheda was invited to a briefing on 29th November 2022 to be advised of your proposals to execute Phase 1 of the reconfiguration of Our Lady's Hospital, Navan on 12th December 2022. Most of the physicians in the hospital were present and there was representation from the departments of medicine, surgery, anaesthetics and emergency medicine. In recent years we have facilitated the emergency bypass protocols of Our Lady's Hospital in Navan for trauma, surgery and stroke. In our previous correspondence we have highlighted to you that these transfers of clinical care took place without adequate front loading of resources to the receiving hospital, Our Lady of Lourdes Hospital, Drogheda. In essence, history is repeating itself.

We deem implementation of reconfiguration on 12th December to be unsafe, and collectively we are concerned that patient care will be compromised, and that patients may die. Reconfiguration of clinical services should only occur when all necessary enabling resources have been secured. We wish to reaffirm that any service reconfiguration requires four key elements: i) infrastructure ii) medical staffing iii) clinical processes iv) professional governance. With our current workload, we are dealing with a deficit in medical staffing of 16 doctors. No new additional appointments have been filled in medicine to facilitate the additional anticipated demand from Navan. The likelihood of filling these deficits in the short to medium term is aspirational. Morale amongst frontline hospital staff is at an all-time low. The extra demands placed on staff in the context of proposed reconfiguration without adequate resourcing will lead to staff burnout and exacerbation of recruitment and retention challenges, all to the detriment of patient care. Frontline clinicians have yet to see the conclusions of the HSE report commissioned to implement this reconfiguration including proposed clinical pathways, governance, and oversight mechanisms to ensure patient safety.

Reconfiguration should not be planned to coincide with the middle of winter, Christmas closures of many community clinical services, and on the cusp of the changeover of non-consultant hospital doctors. We have no doubt that you do not want to be associated with any adverse patient outcomes, or to replicate the mistakes of previous reconfigurations.

We are eager to work constructively with all stakeholders to help resolve issues around patient safety at Our Lady's Hospital Navan. However, we have minimal confidence in the ability of services in OLOLH Drogheda, as presently resourced, to deal with the inevitable surge in clinical activity that will ensue, if this plan is enacted on December 12th 2022. We respectfully ask that you would reconsider the timing of this decision and defer any implementation until adequate resources are in place, as we cannot stand over this plan.

Yours Sincerely,

Dr Tomas Ahern
Consultant Endocrinologist

Dr Elaine Hayes
Consultant Respiratory Physician

Dr Cliona Feighery
Consultant Dermatologist

Dr Paul Keelan
Consultant Cardiologist

Dr Justin Low
Consultant Infectious Diseases

Dr Barry Mc Donogh
Consultant Haematologist

Dr Colin Mason
Consultant Geriatrician

Dr Niamh Murphy
Consultant Cardiologist

Prof Dominic O'Brannagain
Consultant Palliative Care Physician

Dr Margaret Walshe
Consultant Gastroenterologist

Dr Mian Basit
Consultant Physician

Dr Tidi Hassan
Consultant Respiratory Physician

Dr Aftab Khattak
Consultant Endocrinologist

Dr John Keohane
Consultant Gastroenterologist

Dr Niamh Lynn
Consultant Genitourinary Medicine

Dr Paul Mc Keavney
Consultant Nephrologist

Prof Martin Mulroy
Consultant Geriatrician

Dr Blaithin Ni Bhuachalla
Consultant Geriatrician

Dr Subashish Sengupta
Consultant Gastroenterologist

Dr. FARAH MUSTAFA
CONSULTANT EMERGENCY MEDICINE.

DR EOIN KELLY
CONSULTANT IN EMERGENCY MEDICINE

DR AHMAD JAMAL
Consultant Emergency Medicine.

Consultant Palliative Care

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

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Mr Stephen Donnelly,
Minister for Health,
50-58 Block 1,
Miesian Plaza,
Baggot Street Lower,
Dublin 2
D09 XW14

6th December 2022

Dear Minister Donnelly,

We are writing to express our grave concerns at the planned reconfiguration of acute care in Navan Hospital, announced last week. From the media coverage, we understand that from the 12th December 2022, the sickest medical patients (category 1 & 2) will no longer be brought by ambulance to Navan hospital. Instead these critically ill patients will be diverted to another Model 3 or 4 hospital.

From the geography of the county of Meath, it is clear to us that patients from the south and west of the county will be diverted to Mullingar Hospital, while patients from the north and east of the county will be diverted to Our Lady of Lourdes Hospital Drogheda. Over the last 5 years, we have already seen a substantial (23.6%) increase in medical admissions to Mullingar Hospital for patients from Meath. This activity is only going to increase further with this proposed re-direction of Meath patients.

Mullingar Hospital is already struggling to maintain our current activity level, as evidenced by our high Trolleygars in recent months. As of 8am this morning, there were 17 adult patients on trolleys in the ED department in Mullingar. This is due to a combination of an inadequate capacity of acute medical beds for the population we serve and significant staffing shortages. We are all too well aware of the impact this has on older frailer patients particularly. Overcrowding in the ED leads to concerns regarding patient safety, longer lengths of stay and reduced patient satisfaction. As it stands, we simply do not have the capacity to take on any more patients.

In February 2020, Navan Hospital came off acute stroke call. Patients from Meath with a suspected acute stroke are now diverted to Connolly Hospital, OLOL Drogheda and Mullingar hospital. This change came into effect with minimal notice. We were not consulted in that decision, nor were we given any additional resources to deal with the increased patient load. Now it appears that this is happening again. To date, we have yet to be informed officially about the planned ambulance diversions from next week. Our colleagues in OLOL Drogheda were afforded a meeting on 29th November to discuss this proposal and the potential impact on their hospital. We have not been afforded that courtesy.

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

Health Service Executive
Limistéar Lár Tíre
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Midland Regional Hospital at Mullingar
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We are more than happy to engage with all relevant stakeholders to support the planned transformation of Navan hospital. However, in order to ensure patient safety and maintain confidence in the health care system, it is essential that all necessary resources are put in place before any changes are made. This includes improvements to infrastructure and increased clinical staffing in the hospitals that will be impacted by this proposed change. It also involves the development of clinical pathways to ensure seamless patient care between hospital sites. This includes repatriation pathways back to Navan Hospital as well as onward community referrals. Historically we have struggled to access community services in Meath to facilitate discharges from the acute hospital so this needs to be addressed. We also have significantly fewer Non Consultant Hospital Doctors (NCHDs) than Navan despite much higher activity levels. If acute activity is reduced in Navan Hospital, then there needs to be a re-distribution of their NCHDs to the Model 3 hospitals taking on the additional workload.

A complex change like this needs to be planned carefully and deliberately and takes time. It cannot happen in a 2 week timeframe as has been proposed. The timing of this change is also poor – happening in the lead up to Christmas while we are all under severe pressure with high ED activity nationwide. It also comes on the back of a very tough three years of Covid. Our frontline workforce are exhausted and morale is at an all-time low. We have seen a huge exodus of clinical staff to community posts over the last 12 months. If extra demands are put on our staff, without adequate resourcing, more will leave. This will lead to more staff shortages and worsening issues with recruitment and retention. Inevitably this will have a detrimental effect on patient care as well as increasing the risk of burnout in the remaining front line hospital staff.

We echo the concerns voiced last week by our colleagues in OLOL Drogheda. We are very concerned that if this proposal goes ahead as planned on 12th December, that patient care in Mullingar Hospital will be compromised and patients will die. We have neither the infrastructure nor the staffing to take on this additional workload, without additional resources. We respectfully request that you reconsider this decision and delay any implementation until adequate resources are in place in Mullingar Hospital.

Kind regards

Dr Hilary Cronin
Consultant Geriatrician

Dr Clare Fallon
Consultant Geriatrician

Dr Senan Glynn
Consultant Respiratory Physician

pp Dr Ultan Healy
Consultant Endocrinologist

Feidhmeannacht na Seirbhíse Sláinte
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Dr Shu Hoashi
Consultant Endocrinologist

Dr Inam Khan
Consultant Cardiologist

Dr Murat Kirca
Consultant Gastroenterologist

Dr Sam Kuan
Consultant Emergency Medicine

pp Dr Richard Lynch
Consultant Emergency Medicine

Dr Mark Sheehy
Consultant Respiratory Physician

Mr. Declan Lyons, CEO, IEHG
Mr. Ian Carter, CEO RCSI
Mr. Robert Morton, National Director, NAS

8th December 2022

Re: Our Lady's Hospital Navan

Dear Colleagues,

In June 2022, the Minister for Health requested a capacity review for the reconfiguration of the emergency department in Our Lady's Hospital Navan. This review remains under consideration by the Minister and he has requested the review cannot be shared as a result until it has been fully considered by him.

The HSE did receive approval to enhance /update the current ambulance bypass protocol to address urgent patient safety issues for critically ill patients who currently transfer to Navan by ambulance. This cohort of patients will from next week be brought to more suitable hospitals.

The implementation date for the change to the current ambulance protocol was put forward for the 12th December. However because of a planned industrial action by the ambulance service in Northern Ireland on the 12th December it has been agreed with the Director of NAS to move the implementation date to the 14th December as there could be an impact on NAS for the border regions on the 12th December.

In the delivery of the enhanced ambulance bypass for the critically ill patients, please find attached the implementation plan developed by the implementation group.

The implementation group chaired by the National Director Acute Operations and National Clinical Advisor Acute Operations continues to work with both Hospitals Groups and NAS to oversee the delivery of the enhanced ambulance bypass protocol. We appreciate your continued support and assistance.

Yours sincerely,

Damien Mc Callion

_____

Damien McCallion

Chief Operations Officer HSE

CC: Ms. Mary Day, National Director Acute Operations

Mr. Colm Henry, Chief Clinical Officer

Mr. Mike O'Connor, National Clinical Advisor Acute Operations

Extended Ambulance by-pass for OLHN: Implementation Plan

1 Ambulance by-pass

Currently there is a protocol in place whereby ambulances carrying paediatric patients, obstetrics patients, major trauma patients, STEMI care (heart attack) patients and stroke care patients are not brought by emergency ambulance to Navan, but rather are brought to the nearest hospital that can provide care appropriate to their needs.

From December 12th, there will be an extension to this protocol whereby ambulances carrying critically ill patients will by-pass Our Lady's Hospital, Navan and bring the patients to a more appropriate hospital. All other patients will continue to attend OLHN ED.

The Appendix shows the 2022 activity in OLHN ED where there is projected to be 21,600 new attendances to the ED in OLHN, 14% of these attendances are ambulance attendances (c. 3,024). Patients who are critically or seriously unwell or likely to deteriorate account for about 50% of these ambulance attendances (c. 1,512). This represents an additional 4-5 patients per day being conveyed by ambulance to an alternative hospital to OLHN. Analysis was completed on the hospital most likely to receive ambulance attendances from OLHN catchment based on patients' home address. This concluded that 83% would be redistributed to OLOL, 7% to RHM, 3% to Connolly and the remainder 7% distributed between Cavan, Naas, Portlaoise and Tullamore.

After December 12th over 90% of the current ED attendances to OLHN will continue to attend OLHN.

2 Requirements to implement ambulance by-pass

In order to safely implement the ambulance by-pass protocol a number of critical requirements have been identified as outlined below.

1. **Pre-hospital requirements**
   - ✓ **NAS staffing in place:** The required investments for NAS are in place including an additional emergency ambulance 24/7 - including advanced paramedic staffing - which required 11.2 WTE and 1 additional intermediate care vehicle to support repatriation and discharge planning for patients from the Navan catchment area from other hospitals such as OLOL.
   - ✓ **Clinical directive for NAS staff agreed and communicated:** A clinical directive has been developed and communicated to NAS staff in preparation for the implementation of 12th of December.
2. **Inpatient bed requirements**
   - ✓ **Full reconfiguration inpatient bed requirements**: The methodology to calculate the total inpatient bed required for the full reconfiguration of OLHN to a Model 2 hospital is in the Appendix 5.2. This has not been approved for implementation. Based on this methodology it was estimated that between 16 to 34 inpatient beds would be required in OLOL as well as replacement of the 2 ICU beds in OLHN.

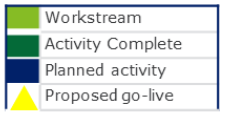
- ✓ **Ambulance by-pass inpatient bed requirements**: Appendix 5.3 sets out the inpatient bed requirements for the extended ambulance by-pass which has been approved. Based on this analysis it is estimated that a total additional bed complement of 14.4 inpatient beds would be required (see Appendix for more detail). This bed complement includes the ICU requirement which is estimated at 1 bed or less to meet the demand. The distribution of these beds is expected to be 10 inpatient beds in OLOL and 4 inpatient beds in OLHN on the basis that 80% of new patients in OLOL would be repatriated to OLHN for the final 2 days of their inpatient stay.
- ✓ **Inpatient beds in place to support extended ambulance by-pass:** The total bed complement of 32 beds identified as being required for full reconfiguration is being put in place to support the extended ambulance by-pass despite the projections indicating that circa 14 beds will be required. This 32-bed complement includes 20 ring-fenced beds in OLHN, 10 additional inpatient beds in OLOL and 2 additional ICU beds in OLOL.

3. **OLHN infrastructure & staffing**
   - ✓ **OLHN inpatient beds:** Total of 62 inpatient beds and 24 rehabilitation beds staffed and available to support admissions through the ED, MAU and repatriation from OLOL for clinically suitable patients. As part of this overall bed complement there will be 20 ring fenced beds in OLHN available at any one time to support the repatriation of patients back from OLOL.
   - ✓ **Patient flow:** A senior ADON is in place to manage transfers from OLOL, and a dedicated phone line is in place.
   - ✓ **Geriatrician/Rehab Consultant**: for OLHN Rehab Beds is currently being recruited to facilitate patient flow between both hospitals. A locum is in place currently covering this role.
4. **Capacity in OLOL**
   - ✓ **OLOL inpatient beds in place & staffed:** 10 additional inpatient beds in OLOL are available in response to increasing demand as a result of ambulance by-pass.
   - ✓ **OLOL Critical care beds in place:** Two additional ICU beds in OLOL are available in response to increasing demand as a result of ambulance by-pass.
   - ✓ **OLOL ED staffing**: The HSE have approved an additional ED consultant for OLOL to support with managing the additional demand as it is recognised that there is growth in demand in ED's across the country due to both demographic and non-demographic growth factors.
5. **Engagement & Communications:** A communications and stakeholder engagement plan has been developed to support ambulance by-pass. The relevant Hospitals, the National Ambulance Service and GPs have been made aware of the plan and any operational implications for them.
6. **Implementation & Monitoring:** implementation and monitoring including post go-live intensive support will be required to ensure success.

3 Timeline for implementation

The week of December 12th was identified as the earliest possible date of go-live for the extended ambulance by-pass on the basis of having the critical requirements identified above in place and sufficient time for communications. While this is happening in the Winter months when ED attendances are high, the risk to patients brought inappropriately to OLHN remains and will likely deteriorate over the Winter months in view of increasing presentations of corresponding groups over this period. The priority is to reduce the risk to patients by implementing ambulance by-pass for the most critically ill patients as soon and as safely as possible. The below is a high-level timeline for implementation.

IMPLEMENTATION PLAN FOR EXTENDED AMBULANCE BY-PASS OF OUR LADY'S HOSPITAL, NAVAN



		Oct					Nov				Dec				Jan			
Week commencing		3rd	10th	17th	24th	31st	7th	14th	21st	28th	5th	12th	19th	26th	2nd	9th	16th	23rd
Requirements for reconfiguration																		
A	**Pre-Hospital Requirements**																	
1	NAS workforce & vehicle requirements in place																	
2	Clinical directive defined and communicated																	
B	**OLHN infrastructure & staffing**																	
3	OLHN inpatient beds and staffing in place																	
4	OLHN ADONs for patient flow in place																	
5	Geriatrician / rehab consultant in post																	
C	**Capacity for displaced activity**																	
1	OLOL inpatient beds & staffing*																	
2	OLOL critical care beds & staffing*																	
D	**Clinical Pathways**																	
1	Follow up pathways in place for patients																	
E	**Communications & Stakeholder Engagement**																	
1	Develop Communications Plan																	
2	Staff communications (OLHN & OLOL)																	
3	Public communications																	
4	GP communications																	
F	**Implement**																	
1	Check-point to confirm actions complete																	
2	Proposed go-live date (ambulance by-pass)																	
G	**Monitor**																	
1	Monitor progress																	
2	Provide intense go-live support to manage																	

4 Appendix

4.1 Overview of current OLHN activity

OUR LADY'S HOSPITAL NAVAN: UNSCHEDULED CARE ACTIVITY OVERIVEW

In 2019, there was a total of 24,672 ED attendances (including 3,200 MAU presentations) with 87% of these being new attendances. For the first 6 months of 2022, the total ED attendances were 12,900, assuming this rate of attendances remains for the full year the attendances are projected to be 25,800. An estimated 84% of these will be new attendances – total of 21,600.

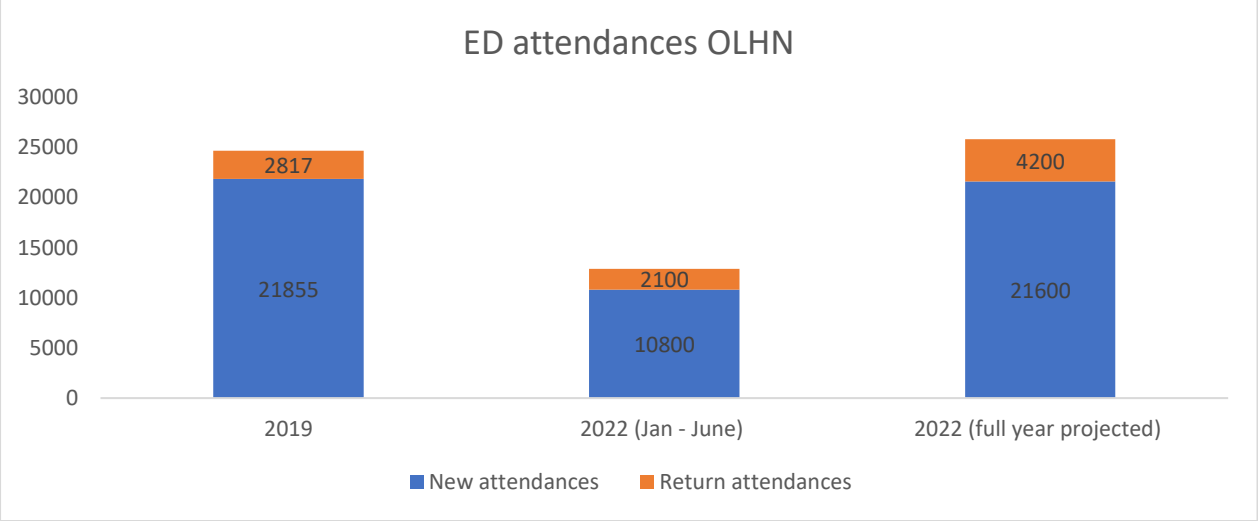


Figure 1: olhn ED attendances 2019 & projected 2022

The majority of attendances are to the Local Injury Unit (46%) while a further 16% of attendances are surgical and 38% are medical.

2019 Attendances (New)

2019 New Attendances		
Treatment Type	New Attendances by Category OLHN (Existing 2019)	% split of New Attendances OLHN (Existing 2019)
Surgical	2,985	16%
Local Injury Unit	8,588	46%
Medical	7,082	38%
Total	18,655	100%
% of Total	100%	

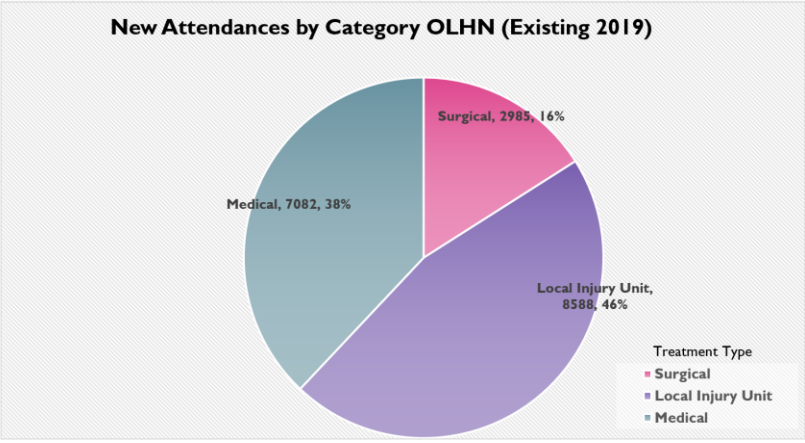


Figure 2: olhn attendances by category (2019)

2022 inpatient admissions

Between January and June 2022 there was a total of 1,659 emergency medical admissions which is projected to be 3,318 for the full year. This equates to just over 9 patients per day. The ALOS for

these admissions was 6.4 days with a total of 21,308 inpatient bed days projected for the full year. Based on this there would be a requirement for 67 inpatient beds at an 85% occupancy rate. These admissions include ICU, HDU and CCU admissions. There is a total of 62 inpatient beds including CCU, 2 ICU and 2 HDU equating to 66 beds currently to meet this demand. There is also a total of 24 rehabilitation beds.

	2022 (Jan - June)	2022 (projected full year)
Admissions	1,659	3,318
Emergency Medical Admissions per day	9.2	9.1
ALOS	6.4	6.4
Bed nights	10,654	21,308
Beds (at 85% occupancy)		67

Table 1: Actual emergency medical admissions in OLHN Jan – June 2022

4.2 Overview of the key changes as a result of reconfiguration

This section provides a summary overview of the main changes in OLHN following full reconfiguration to a Model 2 hospital; the projected activity in OLHN and OLOL; and the capacity projected to be required to meet this demand. It should be noted that the full reconfiguration has not been approved and this methodology is included only by way of reference to the overall requirements. This analysis was completed as part of the review of the reconfiguration with input and sign-off from the National working group which included hospital group CEOs, National Clinical Leads and Hospital Group Clinical Directors.

1. **Projected attendances in OLHN (MAU / LIU) and OLOL (ED)**

As described in the introduction, in 2022 there is projected to be 21,600 new attendances to the ED in OLHN. These are split into Surgical attendances making up 16% of total attendances (3,456); LIU making up 46% of attendances (9,936); and medical attendances making up 38% of total attendances (8,208).

OLHN will retain an LIU and MAU post-reconfiguration meaning the 9,936 attendances to the LIU will remain in OLHN. All surgical attendances at the ED in OLHN would now transfer to OLOL, a total of 3,456 attendances.

Medical attendances will be split across the MAU in OLHN and the ED in OLOL for patients who are not suitable to attend the MAU. Based on the analysis of the attendances at the ED in OLHN currently, 90% of the medical attendances would be clinically suitable for an MAU while the remaining 10% of attendances who are critically ill and would not be suitable for an MAU. However, given there is a high rate of self-referral to the ED we have completed scenario modelling for the medical attendances to provide a range of attendances to both the MAU in OLHN and the ED in OLOL. In order to determine this range an analysis was completed of the attendances to the other Model 2 hospital LIUs per head of population. For the purposes of this analysis two scenarios are put forward.

In summary the scenarios consider the likely patient movement to OLOL and other sites based upon current clinical presentations (Scenario 1) and the possibility of a more significant movement of patients beyond what would be clinically required (Scenario 2). There is no growth in the total caseloads associated with the reconfiguration of services between OLOL and OLHN and there will be an increase in the total bed complement through the additional beds in OLOL. The requirement to ensure safer services for patients in the region is to manage the acute medical patients across the two sites under a single clinical governance. This will ensure that the available capacity is used optimally to support patients at both sites and that the additional investment is used effectively.

Effective patient movement across sites will minimise any risk of increased Patient Experience Time (PET) or trolley numbers in either site.

Scenario 1: based on the analysis completed of ED attendances to OLHN ED, this scenario assumes that all clinically suitable patients remain in OLHN (90% of the 8208) and the other 10% are treated in the ED in OLOL.

Projected attendances in OLHN (MAU / LIU) and OLOL (ED)			
Attendance Type	**"As is" 2022 projection**	**OLHN Post-Reconfiguration**	**Moves to OLOL**
Surgical	3,456	-	3,456
LIU	9,936	9,936	-
Medical	8,208	7,387	821
Total	**21,600**	**17,323**	**4,277**

Table 2: PROJECTED attendances at OLHN (LIU / MAU) and OLOL (ED) based on scenario 1

In this scenario, there is a total of 17,323 attendances at the LIU and MAU in OLHN and there is a total of 4,277 additional attendances at the ED in OLOL, the equivalent of 12 patients per day.

Scenario 2: based on the average attendances to other Model 2 hospital MAUs per head of population and applying this to the catchment population for OLHN.

Projected attendances in OLHN (MAU / LIU) and OLOL (ED)			
Attendance Type	"As is" 2022 projection	OLHN Post-Reconfiguration	Moves to OLOL
Surgical	3,456	-	3,456
LIU	9,936	9,936	-
Medical	8,208	5,898	2,310
Total	21,600	15,834	5,766

Table 3: PROJECTED attendances at OLHN (LIU / MAU) and OLOL (ED) based on scenario 2

In this scenario, there is a total of 15,834 attendances at the LIU and MAU in OLHN and there is a total of 5,766 additional attendances at the ED in OLOL, the equivalent of 16 patients per day. It should be noted that the other MAUs are not open 24/7 as is proposed for the MAU in OLHN, however, given the relatively low ED attendances out of hours this benchmark was applied in order to be conservative.

2. Projected admissions and beds required

All surgical admissions go to OLOL for treatment currently. The uplift in admissions and inpatient capacity in OLOL is based on the new medical attendances. In order to determine the projected inpatient admissions and bed requirements across the two sites we first looked at the actual inpatient admissions and bed nights for emergency medical admissions in 2022. As shown in the table below there was a total of 1,659 emergency medical admissions to OLHN in the first 6 months of 2022, an average of 9.2 patients per day. It is projected that for the full year a total of 67 inpatient beds would be required to meet this demand at an occupancy rate of 85% This includes admissions to the CCU and the ICU. There is a total of 62 inpatient beds including CCU, 2 ICU and 2 HDU equating to 66 beds currently to meet this demand. There is also a total of 24 rehabilitation beds in OLHN.

	2022 (Jan - June)	2022 (projected full year)
Admissions	1,659	3,318
Emergency Medical Admissions per day	9.2	9.1
ALOS	6.4	6.4
Bed nights	10,654	21,308
Beds (@ 85% occupancy)		**67**

Table 4: Actual emergency medical admissions in OLHN Jan – June 2022

Considering the total admissions projected for 2022 and based on the projected attendances at the ED and MAU in each of the above scenarios, two scenarios for the inpatient bed requirements were calculated.

Scenario 1: based on a 90:10 split in medical attendances to OLHN and OLOL

Admission Type	Admission Rate	ALOS	Projected Admissions & Bed Admissions	Medical Beds Required OLHN	Medical Beds Required OLOL
Surgical	N/A	-	-	-	
LIU	0%	-	-	-	
Medical (MAU)	34%	6	2,512	47	
Medical (non-MAU)	100%	6	821		16*

** this requirement includes 2 CCU beds for cardiology admissions requiring cardiac monitoring*

Table 5: PROJECTED admissions to inpatient medical beds at OLHN and OLOL based on scenario 1

In order to determine the bed requirements as a result of this reconfigured activity the following was assumed:

- All surgical admissions currently go to OLOL therefore no additional bed requirement
- 100% admission rate of the 10% critically ill not suitable for an MAU based on the clinical consensus from OLHN on the acuity of these patients. This equates to 821 patients pa.
- 34% admission rate from the MAU was assumed in order to ensure the total admissions equate to the total admissions described in Table 1
- 6-day ALOS used for medical admissions from MAU based on OECD average.
- These assumptions equate to a total of 3,333 admissions pa in line with the actual admission numbers to OLHN in 2022.

Based on these assumptions, the total projected bed requirements are 47 medical inpatient beds in OLHN and 16 medical inpatient beds in OLOL. There is currently a total of 62 inpatient medical beds available in OLHN as well as 24 rehabilitation beds.

In this scenario, in order to ensure there is no increase in inpatient bed nights beyond the 10 additional beds that can be provided it is estimated that 2 patient transfers back to OLHN per day would be required with each transfer having an ALOS of 2 days in OLHN.

Scenario 2: based on a 72:28 split in medical attendances to OLHN and OLOL

Admission Type	Admission Rate	ALOS	Projected Admissions & Bed Admissions	Medical Beds Required OLHN	Medical Beds Required OLOL
Surgical	N/A	-		-	
LIU	0%	-		-	
Medical (MAU)	34%	6	2005	38	
Medical (non-MAU)	79%	6	1819		34*

** this requirement includes 2 CCU beds for cardiology admissions requiring cardiac monitoring*

Table 6: PROJECTED admissions to inpatient medical beds at OLHN and OLOL based on scenario 2

In order to determine the bed requirements as a result of this reconfigured activity the following was assumed:

- All surgical admissions currently go to OLOL therefore no additional bed requirement

- 100% admission rate the 10% critically ill not suitable for an MAU based on the clinical consensus from OLHN on the acuity of these patients for the other patients attending OLOL in this scenario a 67% admission rate has been applied based on the average admission rate for medical patients in triage categories 1,2& 3. This equates to a 79% admission rate for the 2,310 medical patients attending the ED.
- 34% admission rate from the MAU was assumed in order to ensure the total admissions equate to the total admissions described in Table 1
- 6-day ALOS used for medical admissions from MAU based on OECD average.
- These assumptions equate to a total of 3,824 admissions pa which is higher than the actual admission numbers to OLHN in 2022.

Based on these assumptions, the total projected bed requirements are 38 medical inpatient beds in OLHN and 34 medical inpatient beds in OLOL. There is currently a total of 62 inpatient medical beds available in OLHN as well as 24 rehabilitation beds. It should be noted that the other MAUs are not open 24/7 as is proposed for the MAU in OLHN, however, given the relatively low ED attendances out of hours this benchmark was applied in order to be conservative.
In this scenario, in order to ensure there is no increase in inpatient bed nights beyond the 10 additional beds that can be provided it is estimated that 8 patient transfers back to OLHN per day would be required with each transfer having an ALOS of 3 days in OLHN.

4.3 Overview of inpatient bed requirements to support extended ambulance by-pass

As described above there is a plan to proceed with extended ambulance by-pass of OLHN for critically ill patients. There is circa 3,024 patients attending the ED in OLHN per year approximately 50% of these are critically or seriously unwell or likely to deteriorate (c. 1,512). Analysis was completed on the hospital most likely to receive ambulance attendances from OLHN catchment based on patients' home address. This concluded that 83% would be redistributed to OLOL. This represents an additional 1,255 additional patients conveyed to OLOL post the extended ambulance by-pass. Surgical patients are already transferred to OLOL for admission therefore new admissions and inpatient bed requirements is for medical patients only. When LIU attendances are excluded from the ED attendances medical patients make up 70% of the total attendances therefore it is estimated that there will be a total of 878 additional medical patients attending who are critically unwell. Assuming all of these patients get admitted and have an ALOS of 6 days this would require an additional 14.4 beds including both inpatient and ICU bed requirements.

Ambulance attendances per year	3,024
Critically unwell patients	1,512
% Patients conveyed to OLOL	83%
Total critically unwell patients conveyed to OLOL	1,255
% Patients medical	70%
Total new medical patients	878
ALOS	6
Bed nights	5,271
Beds	14.4

OLHN currently has 2 ICU beds for a total attendance of 21,600 at the ED annually. The majority of patients admitted to the ICU are medical and in 2022 there was a total of 8,200 medical patients attending the ED in OLHN. The ambulance by-pass will result in 878 patients being conveyed to

OLOL. While these are the most critically ill it remains only 10% of the total medical attendances to the ED so the demand for ICU beds is assumed to be circa 1 bed following ambulance by-pass.

The remaining inpatient beds outside of the ICU complement will be shared across OLOL and OLHN. If 80% of these new patients (circa 700 per year or 2 per day) were repatriated back to OLHN for the final 2 days of their stay this would require 4 beds in OLHN and 10 beds in OLOL.