

A submission to the National Review of Primary PCI

Discussion Document

2017



CARDIAC SERVICES at University Hospital Waterford

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1. Executive Summary and Recommendations

Executive Summary

1.1 In 2012 the Government published a Model of Care for Acute Coronary Syndrome to standardise treatment of patients suffering from heart attack in its different forms

1.2 In February 2013 the Government published a report '**The Establishment of Hospital Groups as a transition to Independent Trusts**' otherwise known as the '**Higgins Report**'

1.3 The Higgins Report Recommended that :

Waterford Regional Hospital will continue to provide invasive cardiology services for the South East Population

1.4 In May 2016 the **Programme for a Partnership Government** was agreed between Fine Gael, Independent TD's and the Independent Alliance

1.5 The Programme for Government stated:

We are committed to the development of a second Cath Lab in University Hospital Waterford subject to a favourable recommendation from an Independent clinical review of the needs of the region to be carried out within 6 weeks

1.6 In July 2016 a report entitled an '**Independent Clinical Review of Provision of a Second Catheterisation Laboratory at University Hospital Waterford**' otherwise known as the **Herity Report** was published

1.7 This submission challenges the report's findings and recommendations based on:

- A. Existing Government and HSE Policy
- B. The role of UHW as a Regional Level 4 Hospital
- C. The difference between an effective cath lab catchment population and the actual regional population
- D. Distance patients travel for emergency PPCI
- E. Patient safety
- F. Risk analysis

1.8 The Minister for health accepts Dr Herity's findings and recommendations

1.9 The Minister for Health states that before he implements the reports commendations he has asked his Department to address the implications of these recommendations by undertaking a national review of all PPCI services

Recommendations:

1.10 Recommendations for a National Review

This report proposes that a National Review:

- Is framed in the context of existing national and regional policy (the ACS programme and the Higgin's Report)
- Is Independent and based on clinical and medical need
- Consults widely with local clinicians and medical experts
- Is based on the actual population of the South East and not an arbitrary effective catchment population
- Must be cognisant of the range of travel time to hospitals outside the region and not the average time
- Clarifies the status of University Hospital Waterford as a Regional Hospital
- Identifies need and capacity based on the geographical area the hospital serves, namely the South East



2. Introduction:



The provision of Interventional Cardiology Services at University Hospital Waterford (UHW) is an important issue.

It goes to the heart of whether or not UHW is a level 4 Regional Hospital providing tertiary care to the people of the South East.

This submission is based on a commitment from the Minister for Health to undertake a national review of Primary Percutaneous Coronary Intervention (PPCI) in the context of implementing recommendations contained in a report of an *Independent Clinical Review of Provision of a Second Catheterisation Laboratory (Cath Lab) at University Hospital*

Waterford otherwise known as the *Herity Report*.

The Herity Report made eight clear recommendations although three are conditional on implementation of recommendation five.

This is the recommendation which calls for a ceasing of the current limited provision of primary PCI at UHW.

It is the current policy which underpins cardiology services in the South East.

The Minister for Health and the South/Southwest Group has accepted the Herity Report and its findings.

The Minister has acknowledged that it would be prudent to examine the full implications of ceasing Primary PCI at UHW before proceeding to implement the Herity Report in full.

This has led to a National Review of Primary PCI.

The full implementation of the Herity recommendations will be evaluated and examined in this context.

It is therefore vital that this National Review is independent, is based on clinical and medical need and is in the context of commitments contained in the report *into the Establishment of Hospital Groups as a transition to Independent Hospital Trusts* known as the *Higgins Report*.

Deputy David Cullinane

3. The South East Region

A critical question to be addressed in the context of provision of tertiary care at University Hospital Waterford is what is the catchment area the hospital serves and if indeed it is a regional hospital for the entire South East.



In October 2016 I submitted a Parliamentary Question (PQ) to the Minister for Health as below:

PQ *27669/16 **To ask the Minister for Health the actual population mass upon which services at University Hospital Waterford are based.*

The following is the response received:

The catchment area for services at UHW includes the counties of Waterford, Wexford, Carlow/Kilkenny and South Tipperary. The official population of this area per CSO Census 2011 is 497,578. The preliminary results of the 2016 CSO Census indicate that the population has risen to 511,070.

In a separate PQ I requested a breakdown of all tertiary services provided by UHW for patients in the South East

PQ *27668/16 **To ask the Minister for Health the tertiary services University Hospital Waterford provides to patients in the South East.*

PQ Response:

UHW is a recognised cancer treatment centre for Oncology, Haematology, Urology, Lung Cancer, Rectal Cancer Surgery, Breast Cancer Surgery and Head & Neck Cancer Surgery.

UHW also provides regional services for

- ENT in UHW with satellite clinics in Carlow/Kilkenny, Clonmel and Wexford*
- UHW provides elective Orthopaedic Services in Kilcreene Hospital Kilkenny*
- Orthopaedic Trauma patients are seen in all Regional ED centres but are then referred to UHW*
- Renal and dialysis services are provided in UHW and a satellite unit in Kilkenny.*

The Cardiac Cath Lab in UHW is a recognised treatment centre for Primary PCIS and Cardiac Intervention procedures.

The HSE Website states the following in relation to the status of University Hospital Waterford:

University Hospital Waterford provides general medical, surgical and maternity care to people living in South Kilkenny, Waterford City and County. The hospital provides specialty services to the population of the south east c. 500 000 in the following areas of clinical practice:

Cardiology (including Interventional Cardiac Procedures), Trauma Orthopedics, Ophthalmology, Neurology, Nephrology, Rheumatology, Urology, Vascular Surgery, ENT and Neonatology, Radiology, Pathology and Microbiology.

The hospital is the designated cancer centre for the south east, providing rapid access assessment for Breast, Prostate, Lung and Skin cancers. Cancer surgery is centralized at UHW. Hematology, Medical Oncology and Palliative Care is provided through our inpatient and day care facilities.

It is clear that the HSE make a distinction between general medical, surgical and maternity care and specialty services including cardiac care.

According to their own policy University Hospital Waterford provides medical, surgical and maternity care for patients in South Kilkenny and Waterford City and County and for the entire South East in terms of tertiary and speciality services.

In this context it is difficult to understand how the Herity Report recommends an effective population of 286,147 and not the actual population of 582,440.

Below is a table setting out the estimation of the effective cath lab catchment population of UHW by Dr. Herity based on census data and population flow profiles for cath lab procedures:

	2011 census	% to UHW	UHW cath lab catchment population (2011)	2016 census	% to UHW	UHW cath lab catchment population (2016)
Carlow	54 612	6	3 276	56 875	6	3 413
Kilkenny	95 419	26	24 808	99 118	26	25 771
Tipperary North	70 322	9	6 328	71 370	9	6 423
Tipperary South	88 432	53	46 869	89 071	53	47 208
Waterford	113 795	86	97 863	116 401	86	100 105
Wexford	145 320	69	100 270	149 605	69	103 227
Total	567 900		279 414	582 440		286 147

4. Model of Care for Acute Coronary Syndrome



It is important when examining provision of cardiac services in any region that it is put in a national context. Therefore the criteria for determining provision of 24/7 Primary PCI nationally as well as patient throughput is vital.

In response to a parliamentary question (PQ No. 9900/16) the Minister for Health set out the model of care for Acute Coronary Syndrome (ACS) as follows:

The ACS programme was initiated to standardise treatment nationally of patients suffering from heart attack in its different forms. The working group has drawn up protocols for this Optimal Reperfusion Service based on International guidelines and best practise.

Delivery of the programme depends on consolidation of delivery of Primary PCI into a smaller number of centres, major input from the national ambulance service and cooperation from a wide range of stakeholders involved in the management of heart disease.

The designation of Cardiac Units as 24/7 or 9/5 centres is based on current staff and facilities enabling them to deliver an acute coronary syndrome service.

Designations are linked to predicted volumes of activity based solely on population need but also on the link between outcome and activity.

The aim of the programme is to ensure that all patients with ACS nationally are managed according to clear protocols in a timely and efficient manner.

Recommended important characteristics of designated PPCI centres:

- *No refusal policy*
- *Adequate CCU/step down beds*
- *Dedicated call service and points for ECG reception*
- *Relevant skill mix in Cath Lab – Interventional cardiologist, nursing, technical and radiology*
- *Minimum of 2 labs is recommended at 24/7 PPCI centre to ensure access at all times*
- *Minimum roster of 1:5 Interventional Cardiologists is recommended for 24/7 centres (a minimum of 3 Interventional Cardiologists for 9-5 centre)*

- *The aim in this national ORS strategy is for at least 80% PPCI initially with 90% achieved after 5 years*
- *National protocol with local adaption if necessary*

A recent International review, applied to Ireland, would suggest that Ireland aim for a provision of between 4-8 centres

The model of ACS set out allows for two distinct Primary PCI centres

- 24/7 PPCI Centres
- 9/5 PPCI Centres

It also sets out that a minimum of two labs is required for a hospital to become a 24/7 centre.

This is entirely relevant to the South East and is the issue at hand. At present University Hospital Waterford is a 9/5 centre. However patients in the South East who have a heart attack and need to avail of PPCI outside of these hours need to travel to hospitals in Dublin, Cork and Limerick for emergency treatment.

In accessing the implication of the full implementation of Prof Herity's recommendations for the South East it is obvious that the continued existence of 9/5 centres nationally must now be examined.

Speaking at the Joint Committee on Health on Wednesday 8th February 2017 Prof Herity stated:

It was, and remains, my opinion that expanding the service to provide 24-7 cover is not a sustainable solution. Of the options available to resolve this situation, I concluded that UHW should cease the provision of primary PCI and that the interventional management of patients with ST elevation myocardial infarction, STEMI, from this region should be consolidated in CUH and St. James's Hospital, Dublin.

Prof Herity went on to say that:

I would never have reached the conclusion that I would support a 9 to 5, Monday to Friday primary PCI service. Where primary PCI is being provided, it should be provided on a 24 hours a day, seven days a week basis. There is a choice and the choice is black and white.

However according to the ACS Model there is a choice and a number of options are considered. It is not a black and white choice as opinionated. It seems Prof Herity's recommendation to cease PPCI at UHW steps outside the scope of the ACS programme as previously adopted by Government and the HSE.

This is an issue that the review must clarify and should be included in any terms of reference for a national review of PPCI in this state.

5. Higgins Report



In February 2013 the Government published a report entitled *'The Establishment of Hospital Groups as a transition to Independent Hospital Trusts'* otherwise known as the Higgins Report.

The purpose of the report and its recommendations was to reconfigure acute hospitals in groups with an aspiration to develop independent competing hospital trusts.

This led to the breakup of a South East Hospital group. Waterford Regional Hospital was placed into the South/Southwest group alongside Cork University Hospital, Kerry General Hospital, Mercy University Hospital, South Tipperary General Hospital, South Infirmity Victoria University Hospital, Ban try General Hospital, Mallow General Hospital and Lourdes Orthopaedic Hospital, Kilcreane.

St. Luke's Hospital Kilkenny and Wexford General Hospital were placed in the Dublin East Group with Mater University Hospital, St Vincent's University Hospital, Midland Regional Hospital Mullingar, National Maternity Hospital, Our Lady's Hospital Navan, St Columcille's Hospital, St Michael's Hospital Dun Laoghaire, Cappagh National Orthopaedic Hospital and the Royal Victoria Eye and Ear Hospital.



The proposed breakup of the South East group caused fear and understandable tension. With St Luke's in Kilkenny and Wexford General Hospital grouped with hospitals in Dublin it was feared that Waterford would in time lose its status as a regional hospital.

This was further compounded by Waterford Regional Hospital being renamed University Hospital Waterford. It remains to be seen whether this was a Trojan horse or a genuine step forward for the hospital.

However in the body of the report clear recommendations and commitments were given in relation to UHW. These included:

- Waterford Regional Hospital will continue to be an NCCP centre, retaining its current population referral base for cancer patients.

- Joint consultant appointments, such as general surgery shared with Wexford across all groups will continue to support specialist cancer services it provides.
- Waterford Regional Hospital will continue to be a hub for the South East renal services which include a centre of haemodialysis, renal home therapies and renal transplant follow up.
- Waterford Regional Hospital will continue to be a regional trauma centre, including ED, Ear, Nose and Throat (ENT) and Ophthalmology.
- **Waterford Regional Hospital will continue to provide invasive cardiology services for the South East population.**
- Working in collaboration with cardiology service in Cork the current service should be extended with new joint appointments of cardiologists.

It is evident from the above that it was a clear recommendation and policy upon the publication and ultimately the adoption of this report that UHW continue to be the provider of invasive cardiology for the South East population.

However in his report Professor Herity estimated an effective cath lab catchment population of UHW based on census data and population flow profiles for cath lab procedures.

This is seen as a departure from the stated policy of the HSE that UHW provides speciality services to the population of the South East in the area of cardiology and the Higgins Report recommendation that the hospital continue to provide cardiology services for the population of the region.

At the Oireachtas committee hearing mentioned earlier Dr. Patrick Owens, Cardiologist at UHW states:

We contend that the reviewer excluded a large number of patients from his counting of the catchment population for the cath lab, leading to a gross under-estimate, of the order of 50%, of the true value. The determination of the infrastructure needed for meeting with our actual service demand was based on non-real world estimates of the time required to perform procedures; the true estimate shows a need for just over two cath labs, running 9 a.m. to 5 p.m. The evaluation of the primary PCI programme - for treatment of acute heart attacks - at University Hospital Waterford actually exceeded the terms of reference of the review. The recommendation arrived at, however, is to withdraw the service as it exists and replace it with an unworkable alternative.

We feel that this is an extraordinarily one-sided view, and does not take into account potential alternatives that would retain this vital service in the south east and with minimal investment would allow it to meet the minimum requirements of the national strategy, which would fit seamlessly into the broader picture of enhancing service delivery for cardiac care in the south east.

It would seem Professor Herity based his effective catchment population on existing patient throughput with limited PCI and with all the challenges of operating a unit with a single Cath Lab and did not adequately consider alternatives if the service was enhanced.

At the Oireachtas committee Dr. Owens added that:

What is important in any analysis of need is to identify the need of a given population. In a sense this report does things the wrong way around. What is needed initially is to identify the geographical area which feeds into UHW, to the south-east catheterisation laboratory service in this instance, and then apply normative data, which means to apply the percentages per million requiring angiograms, stents and pacemakers, and then work out what the actual need would be for that population. The value of doing it that way around is that the need is identified first. The need drives it. What has happened here is that the number of people who have had procedures has been counted but need has not been recognised.



Above: A Cardiac Catheterisation Laboratory

It is important that the national review recognises the important distinction between an effective catchment area and the actual population of the South East.

It must also first identify need based on the geographical area the hospital serves, namely the South East.

6. Programme for Government

The Programme for Government agreed to between Fine Gael and the Independent Alliance committed to a second Cath Lab for University Hospital Waterford subject to a favourable Independent Clinical review.

The Programme for Government stated:

We are committed to the development of a second Cath Lab in University Hospital Waterford subject to a favourable recommendation from an independent clinical review of the needs of the region to be carried out within 6 weeks. Then, it will proceed immediately to design and planning stage followed by construction, and will be completed and ready for operation without undue delay. In the interim, the hospital will be asked to review the resourcing necessary to extend the existing lab hours with a view to providing a more extensive service. It is understood that the extension and funding of these hours is subject to receipt of a recommendation to proceed with the investment in a second lab. On receipt of this recommendation, partial revenue funds will be liberated immediately to allow for the recruitment of staff to facilitate the extension of lab hours.

This commitment led to the appointment of Dr. Niall Herity MD as the author of a report following an Independent clinical review of provision of a second cardiac Cath Lab at UHW. This led to the publication of a report on 15th July 2016.

7. Herity Report



The publication of the Herity Report in July 2016 caused consternation and astonishment in Waterford and the South East.

The Independent Review was described locally as a formality and the recommendation to cease all Primary PCI caused huge shock and upset.

The full implementation of the report is now subject to a national review.

The Reports recommendations were as follows:

- 1. The range of planned cath lab work that UHW currently undertakes for its catchment population should continue*
- 2. The cath lab service at UHW should be funded and staffed to provide 12 sessions of planned cath lab activity weekly*

3. *A contingency for radiological equipment failure during a procedure, such as a portable fluoroscopy unit with an image intensifier, should be established if it is not in place already*
4. *The cardiology services in the South/South West Hospital group (and especially the teams at UHW and CUH) should agree a strategy that makes best use of their combined excellent skills, cath lab facilities and teams, in order to optimise clinical outcomes for all of the patients across the Hospital group*
5. *The current limited hours provision of primary PCI at UHW should cease, to allow the centre to focus on the much larger volume of planned cath lab work*

If recommendation 5 is accepted, I make these follow---on recommendations:

6. *Patients arriving to the emergency department at UHW should be considered as within a 90 minute drive time of Cork University Hospital and should be transferred there for primary PCI without delay, irrespective of the time of day or night*
7. *The interventional cardiologists at UHW should continue to make their primary PCI skills accessible for the benefit of patients, by taking part in the 24/7 primary PCI rota centred in Cork University Hospital*
8. *A group of local clinical stakeholders (including representatives of the ambulance service) should review the current operation of the Optimal Reperfusion Protocol (Appendix 3) for patients with STEMI in the South East who are more than a 90 minute drive time from a 24/7 primary PCI centre. The group should design the best future reperfusion protocol for these patients, which may be the existing strategy (thrombolysis with immediate transfer), a default helicopter transfer or an alternative strategy. The review should be led by the ACS Programme of the HSE*

I must point out that I fully respect the Independence of Dr. Herity and his professional capability. However I reserve the right to challenge his findings and his recommendations. I do so based on the following:

- A. Existing Government and HSE Policy
- B. The role of UHW as a Regional Level 4 Hospital
- C. The difference between an effective cath lab catchment population and the actual regional population
- D. Distance patients travel for emergency PPCI
- E. Patient safety
- F. Risk analysis

Existing Government and HSE Policy:



As stated earlier existing HSE policy on cardiac services is in the first instance governed by the model of care for Acute Coronary Syndrome. This model sets out a number of different options for PPCI centres and characteristics important to these centres.

The HSE acknowledge the regional role of University Hospital Waterford in providing cardiac services for the population of the South East. This was further reinforced by commitments contained in the Higgins Report.

It is my contention that significant weight was not given by Prof Herity to existing policy and the actual need of the population of the region.

The Role of UHW as a Regional Level 4 Hospital:

It is important that the role and the status of University Hospital Waterford is clarified in any national review. If UHW is to perform as a regional Level 4 Hospital it must be properly resourced and must be in a position to provide the speciality services a regional hospital should provide. The status of UHW as a Level 4 Hospital was not properly examined by Prof Herity in the course of his work.

The difference between an effective cath lab catchment population and the actual regional population:

Prof Herity determined the catchment population on the basis of number of procedures done. This is a completely circular argument and ignores capacity. In his calculations the only group of procedures upon which he did not make a judgment about the size of the catchment was pacemakers. This involves a separate technique used in the lab. This was not used in his calculation of catchment.

The pacemaker implant rate at UHW was far beyond what one would have expected for the catchment as calculated in the report. It is the view of local clinicians that Prof Herity's catchment area is a gross underestimate.

It could be argued, therefore, that the effective catchment area is not correctly calculated. The methodology used does not provide an accurate figure. As highlighted earlier it should be a needs-based assessment, not an assessment based on treatment delivered.

Distance patients travel for emergency PPCI:

In his recommendation No. 6 Prof Herity states that following the ceasing of PPCI at UHW patients arriving to the emergency department at UHW should be considered there for primary PCI without delay, irrespective of the time of day or night.

In effect this means that all patients in the South East who suffer a heart attack will have to travel outside the region for emergency care at all times.

Wexford is the most geographically isolated part of the south east. It is outside the so-called golden 90 minutes all of the time. If Waterford were to close for primary PCI patients Wexford would never be inside that 90 minutes.

Currently, patients in Wexford and elsewhere in the region have access to primary PCI from Monday to Friday, 9 a.m. to 5 p.m. The determination in the report that an 88-minute timeline is acceptable is open to challenge. Firstly this is merely an average time. If that is average, by definition some of those times will be well over the 90 minutes.

No provision is made in Prof Herity's Report to road works, accidents and other factors which could cause a delay. It is also the case that helicopters cannot land on the grounds of UHW or in any of the hospitals in Cork. This results in delays in airlifting emergency patients to Cork.

Patient safety:

It is imperative that patient safety is the primary consideration in reviewing provision of PPCI at UHW.

In a response to a PQ (No 499/17) Minister for Health Simon Harris stated:

In his review of cath lab services in UHW, Dr Niall Herity recommended that the UHW cath lab should operate as an elective lab which provides all specialised cardiac services except interventional treatment for patients who are having heart attacks (PPCI). Dr. Herity recommended that the current 9 to 5 provision of these services should cease in order to allow the hospital to focus on the much larger volume of planned cath lab work.

I accept Dr Herity's findings and recommendations. However, as Minister for Health, I want to be sure that any services changes which we implement, will result in improved services for patients using that service. Therefore, I have asked my Department to address the implications of this recommendation by undertaking a national review of all PPCI services with the aim to ensure that as many patients as possible have access, on a 24/7 basis, to safe and sustainable emergency interventions following a heart attack.

Dr Herity concluded that the needs of the effective UHW catchment population could be accommodated from a single cath lab. However, he recommended investment to enhance cardiac services at the hospital and to provide an additional 8 hours cath lab activity per week to address waiting times and to provide improved access for patients.

However in concluding that the needs of the effective UHW catchment population could be accommodated from a single cath lab he failed to acknowledge that the catheterisation laboratory is, by definition, a single point of failure.

This was addressed by Dr. Patrick Owens at an Oireachtas Committee hearing referred to earlier.

In addressing the hearing Dr. Owens said:

'There is only one table and only one patient comes into the room at any single time. If a patient is on the catheterisation laboratory table and is having an angiogram or a stent inserted, the duration of a procedure can be very long. Somebody could be on the table for a couple of hours or more during complex procedures. Once one starts the procedure one cannot stop, or at least not safely stop.

If somebody is brought in as an emergency to the emergency department or, indeed, is blue lighted in as a code STEMI - ST-elevation myocardial infarction - which is the phraseology for coming in with an acute heart attack, that patient must be accommodated as quickly as possible but if somebody is on the table that cannot happen.

It is not just acute heart attacks. It might be somebody with a life threatening rhythm disturbance or with what is called a tamponade, which is where there is a fluid collection around the heart, and these all must be addressed. If there is only a single unit they must wait or one must stop one's procedure, wheel the patient out and take the acute emergency in. That has happened. Having two catheterisation laboratories greatly diminishes the chances of that eventuality.'

In making his recommendations Prof Herity should have given greater consideration to travel times by ambulance to hospitals outside the region and the cath lab as a single point of failure.

It is the considered view of local clinicians that PPCI treatment is delivered as close as possible to when the diagnosis is made because every minute that passes without treatment is a loss of heart muscle.

Risk analysis:

It is a fact that significant risks were identified by the HSE over several years in relation to cardiac services at UHW. The lack of a second facility was specifically identified as a critical clinical risk on the formal HSE risk register. As a result of this, UHW sought expansion of the service in the south east, with the building, staffing and running of a second catheterisation laboratory to increase case volume and capacity at the hospital.

In addressing the Oireachtas Health committee hearing Dr Patrick Owens said:

'Concerns have been expressed through standard channels since 2013. That is when the risk register was originally utilised, and it is there to flag risk. That is since 2013, and it has been consistently identified as a critical risk up until the start of last year.

At the end of 2014, I wrote both to local management and to the Minister at the time, and again at the end of 2015, identifying this as being a real and present clinical risk which endangered people's lives. In that document I identified that people on the waiting list had had heart attacks already because of the delay in getting patients off the waiting list and into the catheterisation laboratory. It was in that context that, ultimately, the business case was submitted by the HSE management in South/South West nationally for funding and when the formation of Government came around, it was queued for funding, to use the phraseology, centrally. That is where the negotiations started and, subsequently, the Herity report.'

8. National Review of PPCI

The Government have committed to a national review of PPCI to take place this year. It is firstly important to establish what has changed in the South East since the Herity report was published in July 2016.

Prof Herity recommended investment to enhance cardiac services at the hospital in order to provide an additional 8 hours cath lab activity per week and to address waiting times.

Since the publication of the report's publication, an additional €500,000 has been allocated to the hospital for 2017.

Outsourcing planned work:

It is also the case that patients in the South East have been outsourced to hospitals in Cork for planned work.

In November 2016 there were 596 patients listed on the University Hospital Waterford Cardiac Catheterisation Laboratory Waiting list and 130 of these patients were waiting longer than 12 months.

In the context of the clinical risk to patients and the requirement for immediate access to services the HSE arranged for the referral of the 130 longest waiting patients to Cork University Hospital (CUH) and The Bon Secours Hospital Cork for Cardiac Angiography procedures.

The programme of work planned between January and June 2017 is:

- Phase I – 87 Patients
- Phase II – 128 Patients
- Phase III – 124 Patients

Referrals have commenced on Phase I as in the referral of the first 87 patients.

A Service Level Agreement has been agreed between UHW and CUH for the referral of 337 patients.

The terms of the agreement require that diagnostic cardiac angiography procedures will be provided for 337 UHW patients in Cork University Hospital who will be referred back to UHW and remain under the clinical care of the UHW Consultant Cardiologists.

A mobile Lab:

In order to address the cardiology Waiting list in University Hospital Waterford the HSE confirmed that a Mobile Cardiac Catheterisation Laboratory will be deployed with the hospital as a temporary measure. It will be on site for a maximum of four months.

In anticipation of this deployment University Hospital Waterford developed options and costings that will allow for the presenting service need to be met.

The HSE say these costings are under discussion between University Hospital Waterford and South/South West Hospitals Group with a view to ensuring that the optimum solution will be in place and that the best service results are achieved as expeditiously as possible and within the broader service and funding parameters.

The HSE confirm that these discussions will finalise very shortly and it is planned that a mobile solution will be in place early June.

However a Mobile Cath Lab and an outsourcing of planned work is not the solution and nor is it intended as such.

Recommendations for a National Review:

In that context I propose that the national review:

- *Is framed in the context of existing national and regional policy (the ACS programme and the Higgin's Report)*
- *Is Independent and based on clinical and medical need*
- *Consults widely with local clinicians and medical experts*
- *Is based on the actual population of the South East and not an arbitrary effective catchment population*
- *Must be cognisant of the range of travel time to hospitals outside the region and not the average time*
- *Clarifies the status of University Hospital Waterford as a Regional Hospital*
- *Identify need and capacity based on the geographical area the hospital serves, namely the South East*

The South East deserves the same level of services as all other regions. Patients in the South East want safe and accessible cardiac services. This must involve provision of a second Cath Lab and provision of 24/7 PPCI at UHW for all patients in the region.

9. Glossary of Terms and Abbreviations

- UHW – University Hospital Waterford
- PPCI – Primary Percutaneous Coronary Intervention
- Cath Lab – Catheterisation Laboratory
- PQ – Parliamentary Question
- HSE – Health Service Executive
- ACS – Acute Coronary Syndrome
- CCU – Coronary Care Unit
- ECG - Wireless electrocardiogram
- ORS - Optimal Reperfusion Service
- STEMI – ST Elevation Myocardial Infarction
- WRH – Waterford Regional Hospital

10. Appendix

Terms of Reference for the Herity Report:

- i. To consider the clinical need for a second catheterisation laboratory at University Hospital Waterford by:
 - x Setting out the indications for cardiac catheterisation in the context of a comprehensive cardiac service;
 - x Examining patient flows to determine effective current and future population to be served by University Hospital Waterford for cardiac services;
 - x Examining the needs of this population in respect of these indications for cardiac catheterisation;
 - x Examining the workload of the existing laboratory with reference to normative workloads for a catheterisation laboratory in Ireland.
- ii. To make recommendations on the need for a second laboratory based on the expert interpretation of the data and
- vi. To present a report to the Minister for Health within six weeks of establishment.
- vii. The independent expert will engage with UHW, the ACS Programme, the Department of Health and the HSE. Data from UHW will be validated, analysed and compared with data from other settings. It will be necessary for the independent expert to analyse CSO data in relation to the current and projected population of the region, as well as HIPE (Hospital Inpatient Enquiry) data and any other data necessary to analyse information in relation to the actual population using UHW.
- viii. The Secretariat will be provided by the Acute Coronary Syndrome Programme.