

## 1 RCSI Hospital Group Construct

- comprising 7 hospitals



**820 beds**



**264 beds**



**26 beds**



**198 beds**



**407 beds**

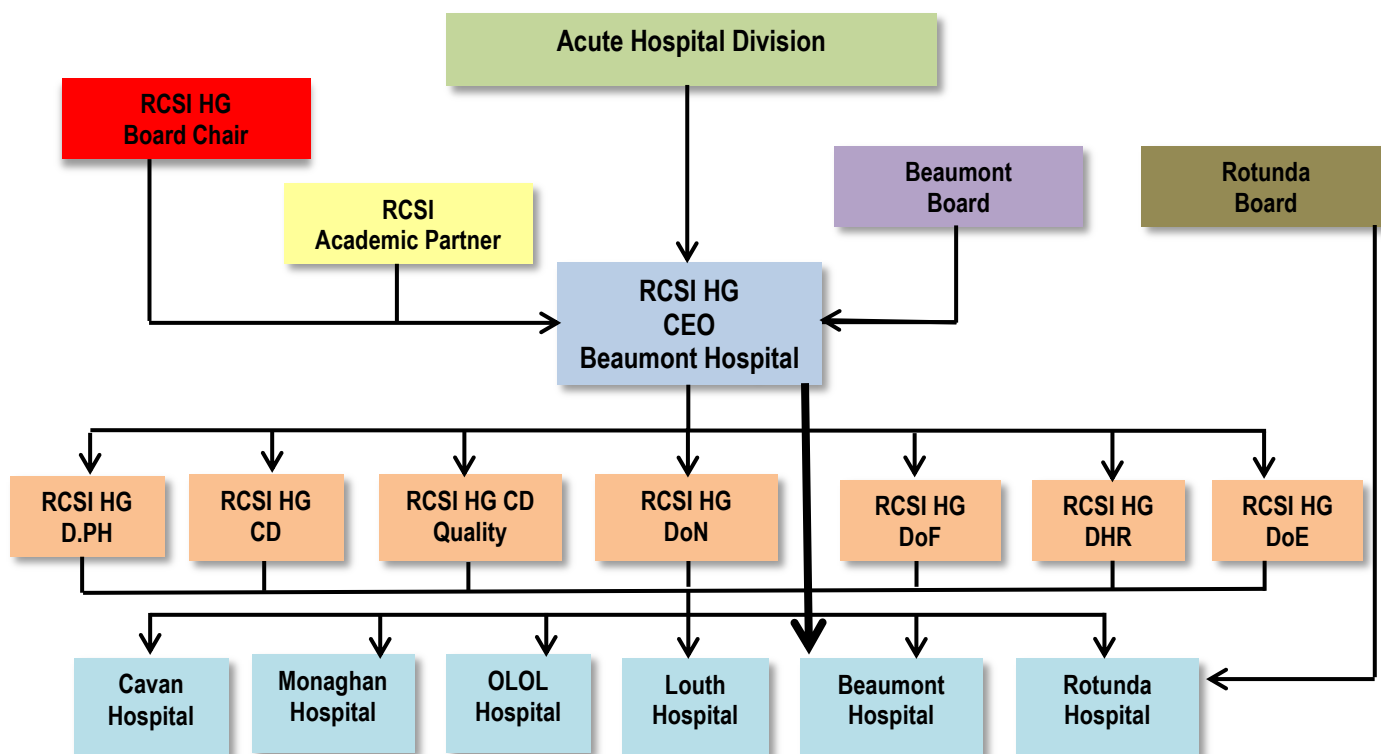


**340 beds**



**137 beds**

## 2 RCSI Control and Governance provisions



Footnote: D.PH –Director of Public Health , CD – Clinical Director, DoN –Director of Nursing, DoF- Director of Finance , DHR –Director of HR, DoE – Director of Estates

### 3 Demographics / related service provision

#### Catchment area

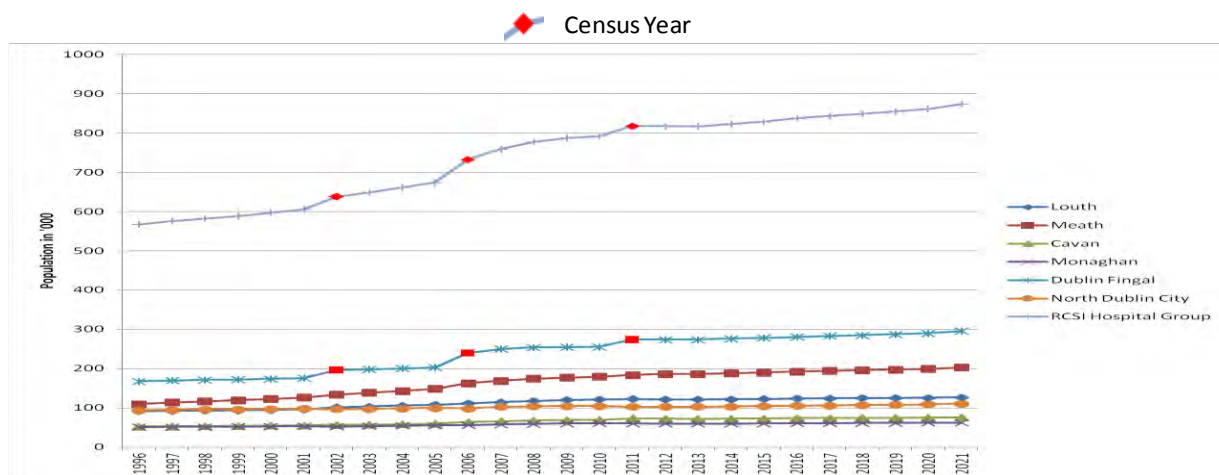
Designated hospitals in the main serve populations in five counties – North Dublin, Meath, Louth, Cavan and Monaghan. The area stretches from the north banks of the River Liffey in Dublin City centre, north to the border with Northern Ireland, and west to the border with County Donegal. It comprises urban, rural and commuter belt areas, and covers approximately 6,817 square kilometres in total. There is considerable variation in population density from a low of 39 persons per square kilometre in Cavan to a high of 4,139 persons per square kilometre in north Dublin city.

Residents of neighbouring areas such as South Dublin and Kildare also access hospitals for secondary care and maternity services. Beaumont Hospital, which is the largest hospital in the group, in addition to providing emergency and acute Secondary Care services to the local community is also a designated Cancer Centre, the Regional Treatment Centre for Ear, Nose and Throat and Gastroenterology and also the National Referral Centre for Neurosurgery and Neurology, Renal Transplantation, and Cochlear Implantation - as such treating patients from all parts of the country.

#### Population Growth and Projections

Population projections for the RCSI HG catchment, and estimates for the population in inter-censal years, were obtained by applying the CSO estimates for the Border (Louth, Cavan, Monaghan), Dublin (Fingal, North Dublin City) and Mid-East (Meath) regions to the counties in the RCSI area. The actual, estimated and projected population for the RCSI catchment area from 1996 to 2021 are displayed in **Figure 1**. The population has grown from 567,753 in 1996 to 817,522 in 2011, an increase of 44%, and is projected to increase to close to approximately 875,000 by 2021. When considering maternity services, an extended catchment area which includes all of north Dublin (due to the location of the Rotunda hospital) is used, and population for this extended catchment area is anticipated to rise from 1 million in 2011, to 1.1 million in 2021.

Preliminary results from the 2016 census show that Fingal was the area with the highest increase in population since the 2011 census with an increase of 8%. Co Meath had the second highest growth increase at 5.9%. The national average growth over the five years was 3.7%. The actual increase in these two areas alone (33,030) accounts for almost one fifth of all the increase in population for the whole country (19.4%).



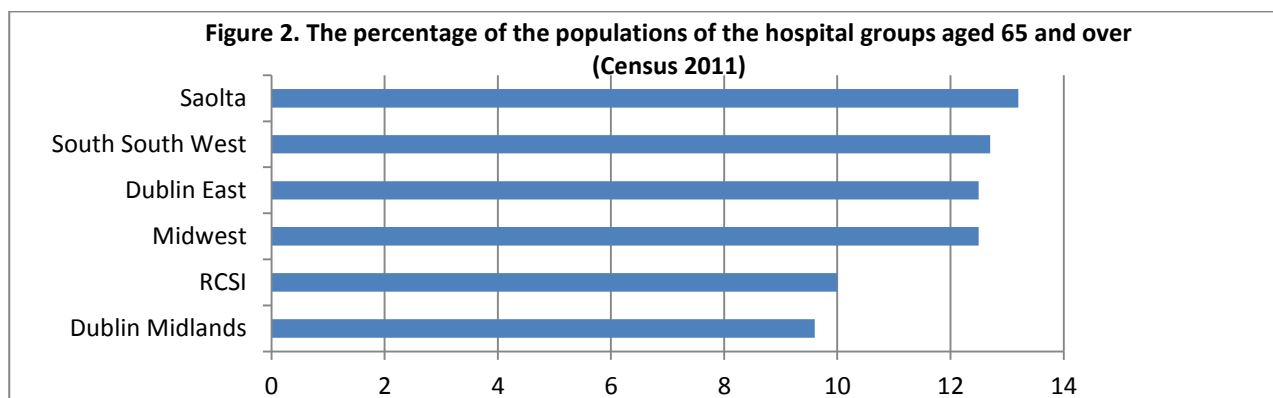
**Figure 1: Actual, Estimated and Projected Population for RCSI Hospitals Catchment Area (restrictive), 1996-2021**

## Population Density

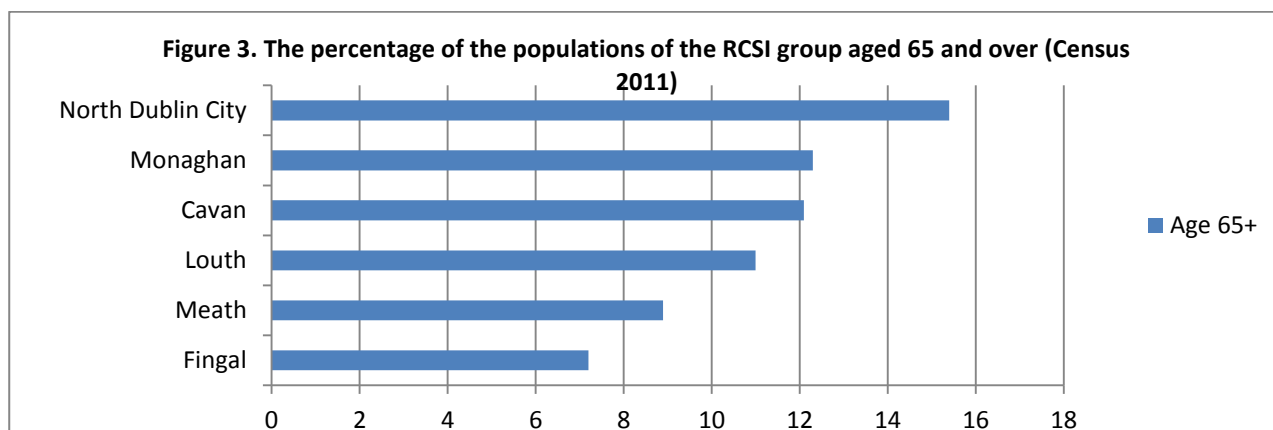
There is considerable variation in population density in the catchment area, with rural, commuter-belt and urban areas. **Table 1** displays the population per km<sup>2</sup> for each county in the area. The population density ranges from low in rural areas (Cavan and Monaghan), to moderate in commuter belt areas (Fingal), to high in urban areas (North Dublin City).

Table 1. Population Density by County, 2011 (CSO)			
	km <sup>2</sup>	Pop	pop/ km <sup>2</sup>
Meath	2,331.9	184,135	79.0
Louth	823.6	122,897	149.2
Fingal	457.8	273,991	598.47
North Dublin City	74.3	307,495	4,139.1
Cavan	1,855.9	73,183	39.4
Monaghan	1,273.5	60,483	47.5
TOTAL	6,817.0	1,022,184	149.9

**Figure 2** displays the proportions of older persons living in the different Hospital Group areas. The oldest catchment area is Saolta, where just over 13% of the total population are aged 65+. Dublin Midlands has the lowest proportion of people aged 65 and over at just less than 10%. The RCSI HG area is very similar at 10%.

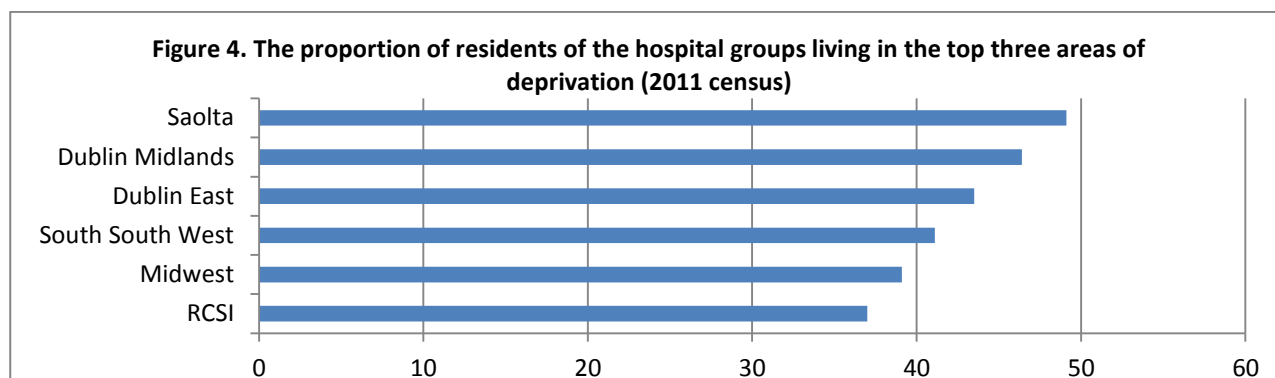


**Figure 3** outlines the proportions of the counties of the RCSI HG aged 65 years and over and highlights the variation with very low proportions of older persons in Meath and Fingal when compared to North Dublin City.

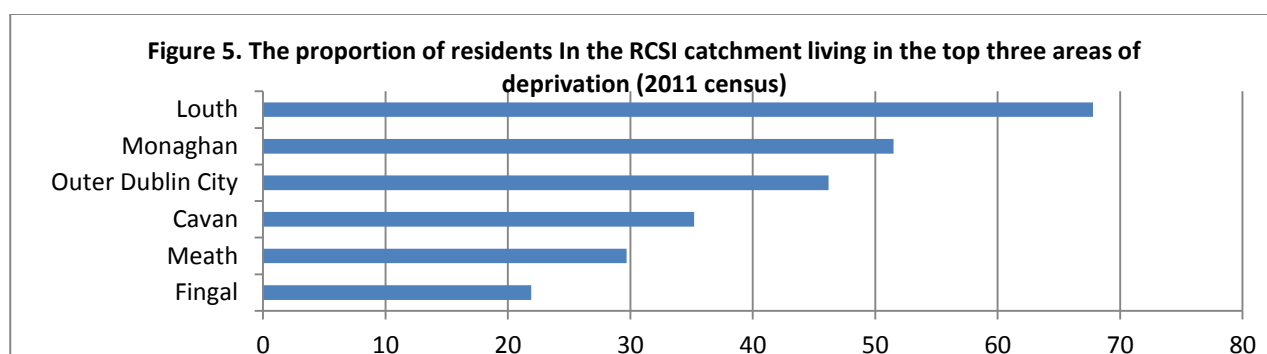


## Deprivation

There is great variation in the levels of deprivation across the Hospital Groups. The RCSI Group has the lowest proportion of the population living in the three most deprived areas (37%) as seen in **Figure 4**. If the extended area for maternity services is included then this percentage would increase to 43%.



Again, there is considerable variation in levels of deprivation within the RCSI area as seen in **Figure 5**. In Louth, almost 70% of the population live in areas in the top three most deprived areas, while Meath and Fingal, on the other hand, each have less than 30% of the population in areas of the highest deprivation.



## Designated hospital usage by population

**Table 2** outlines for 2015 the number of admissions as inpatients, day cases, in emergency departments (ED) or in outpatients (OPD) in our hospitals. As such Beaumont Hospital is the busiest particularly in regard to day cases and OPD visits. Our Lady of Lourdes has the busiest ED. Louth County and Monaghan General Hospitals do not accept emergency admissions. What is noticeable from the table is the relatively low number of elective inpatient admissions arising from emergency admissions. It should though be noted (**see section 4 Performance Metrics**) that this trend has reversed in 2016 as a result of improved internal patient processing (particularly in Beaumont Hospital) and overall elective activity volumes have increased

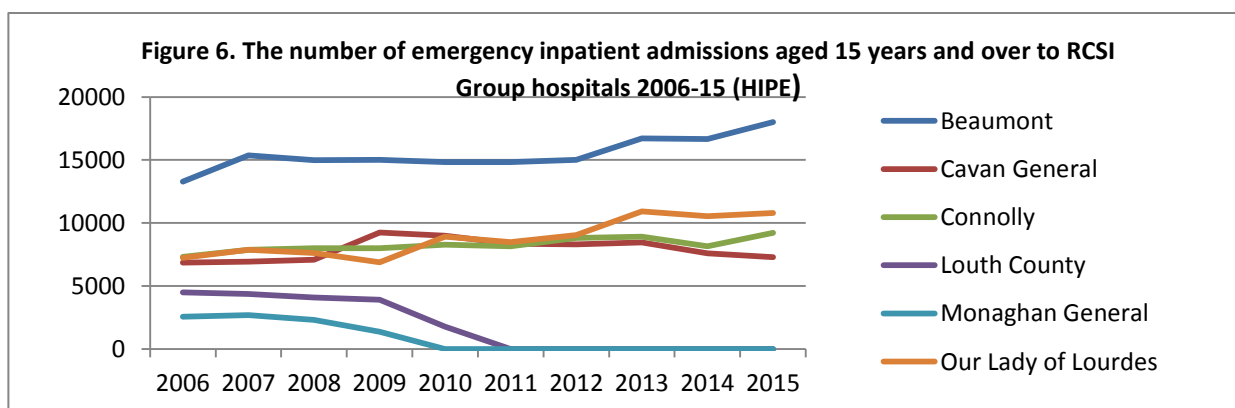
Based on the figures in the table, within the RCSI Hospital Group almost 2,500 patients are seen on average every day of the year

**Table 2. The number of admissions to RCSI Group Hospitals 2015**

	OPD	ED	Day case	Elective inpatient	Emergency admission	Maternity and newborn	Total
Beaumont	149,460	50,618	78,491	4,425	19,082	4	302,080
Cavan General	36,713	37,287	16,782	816	12,638	43,80	108,616
Connolly	51,250	34,116	11,287	1,141	10,993	14	108,801
Louth County	19,821	NA	10,534	115	0	0	30,470
Monaghan General	12,427	NA	4,264	0	0	0	16,691
Our Lady of Lourdes	104,886	53,155	8,801	1,147	19,217	7,642	194,848
Rotunda	109,139	NA	3,379	488	294	21,467	134,767
St. Joseph's Raheny	0	NA	5,423	1,394	24	0	6,841
<b>Total</b>	<b>483,696</b>	<b>175,176</b>	<b>138,961</b>	<b>9,526</b>	<b>62,248</b>	<b>33,507</b>	<b>903,114</b>

### Admission trends for emergency inpatient admissions

As **Table 2** outlined, emergency admissions dominate the inpatient admission landscape. **Figure 6** outlines the ten year trend from 2006 in respect of emergency inpatient admissions to the RCSI Group of persons aged 15 years and over. As such the number of admissions across the group has increased by 9% over the ten year period. During that time both Louth County and Monaghan General ceased accepting acute admissions. Over the ten year period Beaumont has seen an increase in discharges of 36%, Our Lady of Lourdes 49%, Connolly 26% and Cavan 6%. Of particular note has been the rise in the number of discharges from Beaumont and Our Lady of Lourdes since 2011.



### RCSI Demographics (summary)

- The RCSI catchment area has experienced rapid population expansion in recent years, growing from approximately 640,000 in 2002 to 817,522 in 2011.
- This population growth is projected to continue, reaching almost 875,000 by 2021.
- Provisional preliminary data from Census 2016 suggests that the population in the catchment area has now reached approximately 864,000.
- The catchment covers a large area, including urban, rural and commuter areas, each presenting different challenges for service delivery.
- The area includes a relatively young population, with 10% of the population aged 65 and over, compared with 11.7% nationally.

- Some areas within the catchment include higher proportions of older people. In particular, in the area around Beaumont hospital (Dublin North Outer City), 15.4% of the population are aged 65 and over, while Cavan and Monaghan each have approximately 12% of the population aged 65+.
- Older people in the RCSI catchment area were less likely to be living alone, relative to other catchment areas. However, almost a third of older adults in Dublin City live alone, compared with less than a quarter in Meath and Fingal.
- Levels of deprivation in the area were low relative to other Hospital Group catchment areas, with 37% of the population living in areas which are classified in the top 3 deciles of deprivation. This compares with the most deprived catchment area, West/North West, where 49% of the population live in areas in the top 3 deciles of deprivation.
- However, there were sharp contrasts in deprivation across areas. In Louth, 68% of the population live in areas classified as being in the top 3 deciles of deprivation, compared with only 22% of the population in Fingal.
- Levels of good or very good self-rated health among the total population, and older people, varied across the catchment, with better health reported in Fingal and Meath, and worse health in Dublin City, Louth and Monaghan.
- GP provision is low in the RCSI catchment area, particularly in Meath, Cavan and Monaghan. This may lead to increased hospital activity which would be more appropriately carried out in a community setting and increased numbers of hospitalisations which could have been avoided with higher primary care provision

### 3 Performance Metrics

- 2016 annual projected activity based on actual January - September 2016

Hospital	ED New attendances	Inpatient discharges	Births	Day Cases	OPD new attendances	Budget €m (Note 1)	WTE Actual 09/16
Beaumont	49,168	25,265	n/a	87,303	37,375	274.925m	3359
Rotunda	n/a	13,872	8,496	11,228	34,337	49.504m	773
Cavan & Monaghan	29,837	16,360	3,016	21,019	12,997	92.533m	1026
OLOL	53,091	31,120	3,161	9,264	24,779	141.674m	1765
Louth	n/a	117	n/a	10,829	4,048	20.100m	278
Connolly	33,797	14,071	n/a	12,756	14,241	94.954m	1165
<b>Total</b>	<b>165,893</b>	<b>100,805</b>	<b>14,673</b>	<b>152,399</b>	<b>127,773</b>	<b>673.690m</b>	<b>8366</b>

Note 1: Budget 2016 = Gross Expenditure Cap less Income budget

- demonstrating –
  - ED New attendances 16 / 15 – **7.8%** increase for RCSI HG (n = 9,008)
  - ED admissions 16 / 15 – **12.6%** increase for RCSI HG (n = 4,155)
  - Elective 16 / 15 – **0.2%** increase for RCSI HG (n = 20)
  - Day Case 16 / 15 – **2.2%** increase for RCSI HG (n = 2,514)
  - OPD 16 / 15 – **1.0%** reduction for RCSI HG (n = 1,452)



**ED access** – patient wait volume (INMO Trolley Report)

**Connolly Hospital**

04.11.16 ED Patient (Moving Average) Wait Volume 4 / 04.11.15 ED Patient (Moving Average) Wait Volume 8

→ **50% reduction** (actual year to date count value variance 16 / 15 - **43% reduction**)

**LOL Hospital**

04.11.16 ED Patient (Moving Average) Wait Volume 23 / 04.11.15 ED Patient (Moving Average) Wait Volume 24

→ **4% reduction** (actual year to date count value variance 16 / 15 - **29% reduction**)

**Cavan Hospital**

04.11.16 ED Patient (Moving Average) Wait Volume 2 / 04.11.15 ED Patient (Moving Average) Wait Volume 4

→ **50% reduction** (actual year to date count value variance 16 / 15 - **5% increase**)

**Beaumont Hospital**

04.11.16 ED (Patient Moving) Average Wait Volume 15 / 04.11.15 ED Patient (Moving Average) Wait Volume 33

→ **54.5% reduction** (actual year to date count value variance 16 / 15 - **30% reduction**)

- overall significant patient volume reduction in MAWV / ED CV (ED patients waiting for bed accommodation) 16 / 15 demonstrated by RCSI HG

**Elective access – waiting list**

Following performance improvement demonstrated within ED departments across the Group it has been possible to increase IP.DC treatments during the second half of 2016 (2.1% cumulative n = 2,534). Accordingly RCSI HG has been able to commence reduction of existing waiting lists particularly patients waiting >18 months. As such (1) projecting 95% compliance at year end with National Target and (subject to 2017 funding values) (2) achieving 12 month maximum wait time during 2017.

**Budget Compliance / WTE variance**

Within the context of significant increased (predominantly demand led) productivity / ED wait volume reduction:

- **Employment**

Work Force: WTE December 15 - 8228 / September 16 – 8336 – 1.7% increase (n = 138 of which 87 were new funded service development posts and 43 agency conversions).

- **Budget Management**: Actual Expenditure Gross Expenditure Cap set by HSE - < 0.8% deficit (*breakeven*) (income deficit projection 3.7 m).

#### 4 RCSI HG Key Aims and Objectives

- **Improve Access Performance**
  - Emergency
  - Elective
- **Do no preventable patient harm**
- **Fiscal Prudence**
- **Integration**
  - Concept of single controlled delivery unit across 6 sites
  - Migration of available capability to available capacity across 6 sites
  - Integrated community – hospital pathway (with particular focus on Chronic Disease Management)
- **Development of Education and Research capacity and capability with academic partner**

## 5 Key clinical service actions of Group 2016

- Migration of Surgery → Cavan – routine transfer of patients requiring general surgery (DC) from Beaumont services
- Migration of Endoscopy → Cavan – routine transfer of patients requiring endoscopy from OLOL and Beaumont services
- Migration of Endoscopy → Connolly – routine transfer of patients requiring endoscopy from OLOL and Beaumont services
- Creation of ambulatory Gynaecology centre on Connolly campus for all patients within catchment area – no longer requiring attendance to Beaumont or Rotunda
- Creation of Plastic Surgery (minor trauma) service on Connolly campus thereby negating need to attend Beaumont
- Creation of single campus concept between Beaumont and Connolly for specialties General Surgery, Urology, Gynaecology, Dermatology Plastic Surgery – “*benign / simple*” – Connolly / “*complex / cancer*” - Beaumont
- Development of Vascular Surgery on Louth Campus – routine transfer of patients requiring “*simple*” vascular surgery from Beaumont Services
- Transfer of complex upper GI surgery → Beaumont – transfer of patients requiring complex upper GI surgery from Connolly
- Commencement of the development of “*Complex Discharge*” Facility (31 beds) – segregated unit on Beaumont campus, thereby freeing up acute beds (opening April 2017)
- Commencement of establishment of a Foetal scanning service (anomaly scan) for OLOL / Cavan with Consultant work force shared with the Rotunda (operational June 2017)
- Progression of the development of a single image reporting service for Cavan whereby medical work force will be shared between Connolly and Cavan and images reported in Connolly (operational June 2017)

## 6 Key Challenges for Group

### Workforce

- ongoing difficulty in recruitment / retention of nursing staff / other paramedical staff – consequent less than optimal reliance on agency staff.
- ongoing difficulty in recruitment medical staff particularly in relationship to Level 3 / 2 hospitals – consequent less than optimal reliance on agency staff.

### Hospital-centricity

- overly hospital-centric delivery paradigm - particularly in relationship to Chronic Disease – requirement for “*work delivery*” shift to community.

### Community Services

- insufficient timely consistent provision of community support in terms of long term care placement and home care support.

### Funding

- unrealistic “*stretch*” income targets set by HSE – generally not achievable.