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**Submission from Connolly for Kids Hospital to
The Joint Oireachtas Committee on Health**

5th September 2016



Connolly for Kids Hospital dedicates this Submission to
the Children of Ireland.



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Introduction

Connolly for Kids Hospital (C4KH) recommends that the National Paediatric Hospital (NPH) should be built at Connolly Hospital at Blanchardstown and that the Satellite Urgent Care Centre currently planned for the Connolly site should instead be built at St. James's Hospital (SJH) to equitably meet the needs of the nation's children. The NPH project appears to have been hijacked by the adult SJH in collusion with partners in the world of medical academia and the DoH/HSE/DCC to promote adult, not children's, interests.

Currently, only the site clearance enabling works contract has been signed for the St. James's site. Such clearance can be used to facilitate the alternative building of the satellite centre.

Why is the St. James's site wrong for the National Paediatric Hospital?

1. No service-user participation in choice of the location
2. No report ever recommended St. James's site
3. No evidence that clinical outcomes for children will be improved
4. Why the Cabinet chose St James's
5. Access -very limited
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13. Value for money
14. Polluted site
15. No parkland space

1. No service-user participation in choice of the location

In late March 2006, the McKinsey Report having been published the previous month, the HSE reversed a statement made earlier that March, which stated that a greenfield site was an option for the NPH, to declare instead **"The prime consideration is [sic] making this decision on site location will depend on co- location to an adult teaching academic hospital and adult national centres of treatment"**

There was no patient representative or advocate, nor even any paediatric healthcare professional on the "Joint Health Service Executive / Department of Health and Children Task Group to advise on the optimum location of the new national paediatric hospital" set up



that March. C4KH notes that it “*had been decided at the outset of the process that paediatric expertise was not required for the purpose of deciding where to locate the new hospital*”¹. The Task Group recommended that the NPH be built at the Mater Hospital site in central Dublin².

No subsequent review group has been tasked with choosing a location, nor had any service-user representatives on it.

2. No report ever recommended St. James’s site

The following are the Reports regarding the NPH since 2005

- McKinsey Report, February 2006
- Task Group on location, June 2006
- RKW – High Level Framework Brief for National Paediatric Hospital October 2007
- NPH Independent Review, July 2011
- Dolphin Report, June 2012

2.1 McKinsey Report, February 2006

“The National Health Strategy – Quality & Fairness - A Health System for You”, 2001, included a commitment by the Department of Health and Children to undertake a review of paediatric services. In line with that commitment, the HSE commissioned McKinsey & Company to prepare a report advising on the ‘strategic organisation of tertiary paediatric services for Ireland’ that would be *‘in the best interests of children’*.

McKinsey listed nine proposed assessment criteria for planning the proposed new hospital. The third criterion states

“The preferred option would be co-location. If so, needs to be specific about level of integration and sharing of services. If not co-located, need to be specific about how to address the challenges of isolation from adult services”³.

The proponents of adult co-location often omit the option that McKinsey offers in this criterion, that of having a stand-alone hospital.

¹ Minutes of Joint HSE/DoHC Task Group Meeting, 8 March 2006, Received under FOI by the New Children’s Hospital Alliance (C4KH member)

² Location Report – Report of the Joint Health Service Executive / Department of Health and Children Task Group to advise on the optimum location of the new national paediatric hospital, May 2006 available at <http://thenewchildrenshospital.ie/wp-content/uploads/2011/08/XTaskgrouplocationpaedhospital.pdf>

³ McKinsey Report – Children’s Health First – February 2006 available at http://thenewchildrenshospital.ie/wp-content/uploads/2011/08/Childrens_Health_First_McKinsey_Report_2006.pdf



2.2 The Task Group on Location, June 2006

As stated in 1 above, this report recommended the Mater site.

2.3 RKW -High Level Framework Brief for National Paediatric Hospital October 2007

The RKW Higher Framework Brief states “This brief takes as given...the decision of the Task Group [on NPH Location, 2006], endorsed by the HSE, that the hospital should be located at the Mater site.”⁴

2.4 National Paediatric Hospital Independent Review (July 2011)

The Terms of Reference of this Review are noted to be very restrictive. In Opposition, 16/01/2007, the Fine Gael leader Enda Kenny had challenged the government to conduct a review of the process of the selection of the Mater site, saying he had “a deep suspicion something is amiss”. On 24/03/2011, the eve of the general election, Fine Gael stated “if in Government, **Fine Gael will review the entire proposal** as a matter of urgency”.

Despite this promise a full and thorough review of the choice of location was never undertaken.

The review commissioned by the Fine Gael Health Minister Reilly in 2011 was confined to two points, firstly financial analysis and cost comparison and secondly analysis of clinical, design and access issues between the Mater site and three ‘notional’ sites close to the M50⁵.

No specific clinical advantage was mentioned in the report. It merely states that:

“It should be acknowledged that while the clinical advantages available from co-location with an adult hospital are positive, the distribution of tertiary adult services across the metropolitan Dublin area is fragmented. However, this does not compromise the advantages and efficiencies of co-location that are possible with shared non-clinical support services.....

⁴RKW Report Part 1- High Level Framework Brief for National Paediatric Hospital – Page 32 ,October 2007 available at http://thenewchildrenshospital.ie/wp-content/uploads/2011/08/High_Level_Framework_Brief_National_Paediatric_Hospital_Part_1.pdf

⁵NPH Independent Review, DoH <http://health.gov.ie/blog/publications/national-paediatric-hospital-independent-review/>



...All groups presenting to the Review Team spoke of the **imperative** of additional co-location (tri-location) with a tertiary maternity and neonatal service.” [our emphasis]

FAQs were issued in a Q&A sheet issued by the DoH on the occasion of the Press Conference to launch the Independent Review. One reads as follows:

Q. “How/why were the notional sites selected?”

A. **It is important to remember that this Review was not a site selection process.** The three notional sites were selected to address issues that had been raised regarding possible savings from building on a greenfield site and concerns around access and proposals for options to build on a site on or near the M50.”⁶

2.5 Dolphin Report (June 2012)⁷

(i) Forward by Dr Frank Dolphin, Chairman

“I believe that the work of the Group provides the groundwork on which a viable decision can be made. While *it was not our role to select the site* we have taken care to consider the most viable and practical options available.

(ii) Letter from Dr Frank Dolphin to candidate hospitals

This letter seeking supplemental information from candidate hospitals signed by Dr Frank Dolphin stated

“The Group has been asked to consider the options that exist to progress the building of a National Children’s Hospital, and *is not engaged in a site selection process*”⁸.

(iii) Conclusions and recommendations

“From a clinical and academic perspective, we identified St James’s Hospital as the existing DATH [Dublin Academic Teaching Hospital] that best meets the criteria to be the adult partner in co-location because it has the broadest range of national specialties and excellent research and education infrastructure”.

⁶http://health.gov.ie/wp-content/uploads/2014/03/NPH_Review_FAQs.pdf

⁷ The Dolphin Report, June 2012. The Review Group on the National Children’s Hospital available at http://health.gov.ie/wp-content/uploads/2014/08/Dolphin_Group_Report.pdf

⁸ Appendix 2, Sample letters seeking data from hospitals, Dr Frank Dolphin, 12 April 2012, available at http://health.gov.ie/wp-content/uploads/2014/08/Dolphin_Full-Appendices-1-5.pdf



“From a design and planning perspective, the sites adjoining Connolly and the Coombe hospital offer the best potential for future expansion and a landscaped setting.” It further states “The 36-hectare site on the National Sports Campus lands proposed by Connolly Hospital offers an attractive parkland setting and practically limitless scope for future expansion. Access by car is excellent, (our emphasis) and existing bus services could be upgraded to meet demand”.

C4KH, however, does take issue with the comment in the Dolphin report that Connolly, a Model 3 academic teaching hospital –

“would need very substantial investment of human and capital resources to develop over time into an adult tertiary hospital with critical mass supported by leading-edge research facilities, and even if such resources could be made available it could take several decades to achieve such high standards of clinical and research excellence. The proposed integration with Beaumont and RCSI, and the Universities would have to be accelerated.”

This ‘opinion’ seems to reflect the composition of the Dolphin Group rather than being based in fact. The upgrading of a Model 3 to a Model 4 hospital has been successfully achieved in Ireland and such transition need not be a prolonged affair.

3. No evidence that clinical outcomes for children will be improved

The clinical sub-group in the Task Group on Location found

“no evidence in the Medical Literature indicating improved outcomes for children from adult hospital co-location”.

It sought international experts’ opinions and produced a document “A prioritization exercise for the collocation of adult hospital specialities with a tertiary paediatric hospital” – few of the priority specialities listed in that document are in SJH⁹.

C4KH says –

- The NPH does not require SJH, few of whose specialists are co-trained in adult and paediatric sub-specialities. The NPH will be self-sufficient in clinical, in diagnostics and in paediatric laboratory medicine. Consultants, a small minority, mainly in a few surgical specialties, who are dual-trained in paediatric and adult subspecialties will continue to work across various Dublin hospitals as required. Incidentally, most ‘adult only’ consultants work in more than one adult hospital.
- The NPH requires a Maternity hospital– to co-open with it to ensure improved clinical outcomes for the newborn.

⁹Clincial subgroup of the Joint Health Service Executive / Department of Health and Children Task Group to advise on the optimum location of the new national paediatric hospital” Available at <http://thenewchildrenshospital.ie/wp-content/uploads/2011/08/Priorities-co-location-Task-Group-2006.pdf>



- The National Paediatric Research Centre will go to whatever site the main NPH hospital goes.
- RCSI graduate-entry medical school is already on-site at Connolly. The hospital is a teaching hospital for Dublin City University's Nursing degree program and links with University College Dublin, Trinity College Dublin and the Institute of Technology in delivery of Allied Health Professional education. A Regional Centre for Nurse Education is located on site.

The NPHDB and the Children's Hospital Group Board (CHGB) have failed to produce any evidence of improved clinical outcomes for children from adult co-location despite numerous requests to do so. It is self-evident that it is the redevelopment of the adult SJH campus that is the main aim of this project and that children are being used to achieve that end.

4. Why the Cabinet chose St. James's

On 6th November 2012, the Cabinet chose the St. James's hospital campus as the new site for the NPH on the recommendation of the then Minister for Health, now senator, James Reilly. The Department of Health press release of that date states

"The decision has been led by clinical considerations".

What clinical considerations led to this choice of site by the Minister?

The following transcript from 23rd June 2016 is, to the C4KH group's knowledge, the first public record of the reasons Minister Reilly presented St. James's for endorsement by Cabinet.

Transcript Radio Interview:

Newstalk Programme: Moncrieff¹⁰

Date: Thursday 23rd June 2016. Time: 13:50hrs Duration: 03:00mins

St James's Children's Hospital Site. Senator James Reilly on why he chose the correct site to build the new National Paediatric Hospital

Sean Moncrieff: Senator James Reilly is still with us, we have been talking obviously about the Health Service. And we've had a few texts in here on a kind of similar theme. Please ask Senator Reilly why he chose the Wrong Site at St James's for the Children's Hospital? Blanchardstown is more accessible, faster, cheaper and has the Rotunda going there. No one can explain this Medical Specialty Reason either. Can he?

¹⁰Seán Moncrieff interviews Senator James Reilly. Newstalk106 -108, [NPH comments starts at 13 min into the interview] 23.06.2016



Senator James Reilly (Fine Gael): First of all I didn't choose the Wrong Site. I chose the Right Site. As advised by an Expert Group of both National and International People¹¹.

I will actually explain what the primary concern here was. We have a small population, North and South, for some of the more rare conditions. What we wanted to achieve was an economy of scale here, where we would have sufficient numbers to deal with some of the rarest of problems, which currently require our children to go abroad for treatment.

Now if you're ill with a condition as an Adult, it's distressing. But when you're a Child, it's particularly distressing, and you want your family around you. So the more people, more children we can treat in this country, that was the goal. So the being able to bring the Experts, the Super Specialists, who deal with Adults and Children, for these very rare conditions, was a primary concern, and the primary clinical driver.

Certainly, you know, the arguments made around access, and at a greenfield site. I mean you might as well go to a greenfield site, no disrespect to James Connolly. Because you know, James Connolly it's an excellent Hospital, but it's a Model 3 Hospital, it doesn't have the Super Specialists in there. The bulk of them are in St James's.

The site is plenty big enough, plenty big enough. And it has excellent transport connectivity. Now people talk about a sick child, you're not going to use public transport. That is never the case anyway, because a sick child is always brought in by an Ambulance or parents in a hurry. But the main traffic in any large Hospital like that, is Staff. And the fact that Staff can get in and out in a way that doesn't cause all sorts of traffic problems, because the infrastructure is there, is a huge consideration. We went through this back and forth and back and forth. And at the end of the day, I am from Fingal, and Blanchardstown is in Fingal, so I mean you know Fingal would have been attractive to me. The Mater was attractive to me. But at the end of the day, the best, the best decision, on the best of advice was St James's. And I believe now what we have to do is, and I know there's a petition out there with 60,000 people saying, you know, move it. Let's please not revisit this. There are children who are in trouble today. This hospital needs to be built as quickly as possible, not delayed by another two years of wrangling. The decision is made. The money is there. Let's build it as quick as we can. So that we can truly say that those dark days, and how we treated children in the past, and God knows they were dark, are done. //

¹¹If Senator Reilly is referring to the Dolphin Group we note that it had only one non-Irish member- the CEO of Liverpool Children's Alder Hey Hospital whose new non-co-located hospital has opened, Oct 2015, on a greenfield site.



C4KH completely rejects this utterly ridiculous claim regarding rare diseases which has no evidence base. There are no rare diseases in children that can be treated by adult hospital 'super specialists' from an adjacent hospital. Children with rare diseases which cannot be treated in the NPH will continue to be referred to paediatric centres abroad which have global referrals and expertise in particular diseases of childhood. Relevant clinical priorities were set out by the DoH/HSE location Task Group¹².

Improved clinical outcomes will result first and foremost from the Dublin children's hospitals coming together to form the NPH. The breadth and depth of specialisation (>39 specialities including diagnostic services) will be concentrated *within* the NPH. It is not dependent on adult expertise or equipment in an adjacent hospital.

Where consultants are trained in both adult and paediatric specialist care eg Orthopaedic specialists treating patients with scoliosis, such patients will continue to transition to the various adult hospitals where their consultants do their adult patient work such as Cappagh and Tallaght. St James's hospital does not have the capacity (theatres, beds, outpatient clinic availability) to absorb such patients or their NPH consultants into its adult services.

The NPHDB and the CHBG have argued that diagnostic equipment in the adult hospital will be used by the NPH. This is not the case.

C4KH states:

- It is not appropriate that children in the NPH are exposed to an adult hospital environment.
- The NPH will have its own PET-CT. Furthermore, the public PET-CT scanner at SJH is already used to capacity for adult patients.
- The NPH will have a 3-tesla MRI scanner and will care for the Advanced Imaging needs of its own patients.
- Paediatric anaesthetists and appropriate anaesthetic equipment are required for many imaging procedures.

Radiotherapy for children

- Children from Our Lady's Children's Hospital Crumlin (OLCHC) will continue to go to St.Lukes Hospital in Rathgar until/if St.Lukes relocates to SJH. Anaesthetists from OLCHC put children to sleep in St. Lukes. Children may travel from home to receive radiotherapy- co-location is irrelevant for these as they are not inpatients.

¹²A prioritisation exercise for the collocation of adult hospital specialities with a tertiary paediatric hospital in Dublin , received under FOI, available at <http://thenewchildrenshospital.ie/wp-content/uploads/2011/08/Priorities-co-location-Task-Group-2006.pdf>



It is impossible to predict what radiotherapy or other equipment of the future will be developed to treat adults or children. Such technology may (eg proton beam) require very significant expansion space.

Let's plan for the future and go to expansion-friendly Connolly.

5. Access - very limited

- SJH is on a long, narrow, site of 48 acres, ten of which are leased to Trinity College and 38 to the Board of SJH. The HSE holds the freehold.
- The site is only accessible by a single entrance at either end.
- Ambulances, buses, taxis, cars and cyclists will compete for space on the single 6-metre wide internal road. No cycle lane can be accommodated.
- NPHDB is planning an additional new entrance at the SJH energy centre at Faulkner's Terrace on Mount Brown -which is a very narrow, single lane continuation of James's Street, where the road descends to the west to become the Old Kilmainham Road. This entrance will merely access the new basement car park and a service yard. Mount Brown, close to the Camac River, is renowned for its susceptibility to flooding – the road was impassable for more than four hours as recently as last May!
- The inability of the access roads (all single lane) to cope with more traffic, has resulted in Dublin City Council imposing a car parking limit of 2,000 for the entire St. James's site.
- Roads around SJH are already notoriously congested and will be problematic for parents with sick children in cars ("parents in a hurry" as Senator Reilly calls them).

Ambulances – the National Ambulance Service(NAS) informed the Dolphin group (F.O.I. data)¹³ that

- "exemptions provided to ambulances do not increase their speed in high-traffic areas....[and]...
- an important factor in relation to location is good access to a major thoroughfare such as the M50".

C4KH wishes to emphasise that the NPH, unlike adult hospitals, will be the *sole* facility receiving ambulances from the whole of the GDA and that ambulances will bypass the satellite centres. C4KH is dismayed by the single lane access roads, the limited entry points to the James's campus, the single narrow congested through-road in the campus and GDA's only paediatric Emergency Department being buried at the back of a new National Hospital-

¹³Minutes of Dolphin Group Meeting 2 May 2012, received under FOI by the New Children's Hospital Alliance (a C4KH member)



the last apparently to accommodate adjacency for the adult Emergency Department to the route from the shared helipad on level 4 of the NPH.

Helipad

SJH does not have space for a ground helipad. It is unacceptable that as Ireland's major referral centre for children the new 'HUB' hospital cannot accommodate such an essential facility.

Coastguard Sikorsky helicopters must land on the ground and a recent DoH working group recommended that "all future acute hospital developments in the State take into consideration the need for inclusion of a ground helipad, to facilitate the arrival of patients via the EAS and SAR, inter-hospital transfers and the transport of organ transplant patients and teams".¹⁴

6. Parking - totally inadequate

The NPHDB states that the parking being provided for families at the St James's site will be treble the current available parking at the existing three children's hospitals in Dublin.

- This claim is inappropriate and incorrect. It does not acknowledge that The Children's University Hospital Temple Street doesn't even have a car park, and that
- No separate parking allocation exists for the children's hospital at Tallaght, its car parking being fully integrated with that of the adult hospital.
- Figures from the Administration Department at OLCHC in 2010 list 480 spaces available at that hospital (six being for 'disabled' parking) while its Development Control Plan states a requirement for 980 spaces. Much of the parking at OLCHC currently occurs on residential side streets around the hospital. This causes problems for local residents.
- Although almost 1,000 car parking spaces will be built for the NPH this will only result in a net gain of approximately 400 spaces for the whole campus at St. James's because the children's hospital will displace >600 spaces of existing surface car parking.

The 1,000 car parking spaces proposed for the NPH at St James's is by far the smallest parking allocation of any recently built children's hospital with only 2.1 spaces per bed. In comparison, the stand alone Melbourne Children's Hospital, opened in 2011, provides 6.4 spaces per bed. The stand-alone Alder Hey Children's Hospital in Liverpool which opened in 2015, provides 4 spaces per bed. Were the Coombe Maternity Hospital ever to transfer to

¹⁴Report of the Emergency Aeromedical Support Service Working Group, November 2014 available <http://health.gov.ie/wp-content/uploads/2016/05/Report-of-the-EAS-Working-Group-final-version-11.11.14-minus-watermark.pdf>



the site, not a single extra parking space can be provided because of the restrictions imposed by Dublin City Council.

Public transport is still very underdeveloped in the Greater Dublin Area (GDA). It is rarely an option for sick children, over 90% of whom access hospital by car.

Does anybody care?

St. James's Campus On-Site Car Parking (Final)

Hospital	Staff numbers	Staff spaces	Bed numbers	Patient/ Visitor spaces	Total spaces per Bed
Adult	4,500	403	1,020	416	0.8
Children's	3,000	312	473	675	2.08
Maternity	800	0	240	0	0
TOTAL	8,300	715	1,733	1,091	1.05

Note: Trinity College with 52 spaces and the Blood Transfusion Service with 140 spaces make up the balance of the 2,000 spaces permitted by DCC¹⁵

The staff parking allocation is woefully inadequate. Staff from the adult hospital may, An Bord Pleanála (ABP) oral hearing was informed, compete with staff from the NPH for the 312 staff spaces (reduced from 325 because of ABP's requirement to increase in number of 'parent and child' spaces) in the NPH underground car park¹⁶. Targets required to reduce staff car dependency and for staff to use public transport instead are so ambitious that they have never been achieved anywhere in the world. Even a cursory look at the National Health Service Foundation Trust hospitals in the UK reveals more respect in terms of parking provision for the precious resource that is staff¹⁷. The high price of housing puts purchase of a house in Dublin beyond the reach of the majority of staff. Many commute by car from the satellite towns of the Greater Dublin area (GDA). The use of public transport for shift workers to get to work from most of these locations is not an option.

Understandably Dublin City Council doesn't want more cars on the narrow roads of the inner city. Neither do parents want to be on these roads. Sick children travel by car. The NPH, a

¹⁵Compiled from data from NPHDB planning application and estimated from current maternity hospitals bed numbers and staff levels

¹⁶An Bord Pleanála Board direction Ref 29S PA0043

¹⁷Department of Health Health Technical Memorandum 07-03: NHS car-parking management (2015 Edition) available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/481556/HTM0703NovemberUpdated.pdf



new 21st century children’s hospital, should not be in the city. There is a more appropriate child-centred option - Connolly.



Children’s Hospitals worldwide	Spaces per bed
Colorado, USA	14
Boston, USA	8.8
Alder Hey Children’s Liverpool	4.0
Melbourne, Australia	6.4
Toronto, Canada	4.4
NPH at St James’s, Ireland	2.1

ABP’s inspector’s report on the NPH at the Mater stated that “the parking provision which is considered to be sustainable within a city centre location would be inadequate to facilitate the effective operation of the proposed development”¹⁸. C4KH believes that this applies even more so to St. James’s.

¹⁸An Bord Pleanála Inspector’s Report PA0024, Jan.2012



7. Expansion space - insufficient

- The 20%¹⁹ expansion capacity provided for future expansion of the NPH at SJH is short-sighted in the extreme and when built on will eliminate any remaining external green space accessible to the public. Toronto Children's Hospital has doubled in size every 10 years since its foundation in the 1950s. Great Ormond Street Children's Hospital has almost trebled in size in the past 30 years. Closer to home, the clinical space at OLCHC has increased by 75% in just the past 15 years. The stand-alone Melbourne Children's Hospital was originally built on the border of the 280-acre Royal Park. When the decision to rebuild the Melbourne hospital was made, because of the plentiful available space, the new hospital was built adjacent to the old one which was subsequently demolished and the original site was returned to parkland. The new stand-alone Alder Hey Children's Hospital which opened in 2015 is also built in a parkland setting.
- The Ronald McDonald Charity had hoped to open a 60-bed family unit accommodation facility but only 53 could fit due to lack of space at the constrained site at St. James's.
- The Children's Research and Innovation Centre - The Children's Research Centre in its submission to the Location Task Group²⁰ in 2006 stated that it would require 3000-4000 m² with capacity to expand to 12,000 m². Due to site constraints at St James's, less than 3,000m², with no expansion space, is being provided at the far end of the campus from the NPH in what is "essentially a laboratory building"²¹ joined to the Trinity Molecular Medicine Centre.

8. Care of adolescents

Ireland needs to appoint a medical consultant trained in Adolescent Medicine (a sub-specialty of paediatrics). Until this happens adolescents will continue to get a raw deal from both paediatric and adult services as no authoritative medical voice will fight their corner.

Shamefully, the NPH will NOT change the upper admission age limit from 'eve of 16th birthday' despite numerous requests from child advocacy groups."There are many issues in managing older adolescents in a paediatric environment" according to the recent National Model of Care for Paediatric Healthcare Services²².

¹⁹NPHDB National Paediatric Hospital Project, Design Report, page 72, available at <http://www.nchplanning.ie/wp-content/uploads/2015/07/1-Design-Report1.pdf>

²⁰The Children's Research Centre "A Vision for the Future" 2006 Received under FOI

²¹An Bord Pleanála 29N PC0158, 23rd June 2015

²²National Model of Care for Paediatric Healthcare Services in Ireland, Executive Summary, December 2015 available at



Below is one such request to raise the age-limit from the organisation “Children in Hospital Ireland” submission to the NPH²³

“The new National Paediatric Hospital must cater for the admission of child patients up to (at a minimum) the age of 18 years. Bed numbers must reflect this..... The three children’s hospitals do not routinely admit children over 15 or 16 years of age who have not been attending the hospital on an ongoing basis. This is significant in that current calculations on bed requirements rely on an upper age limit of 15 or 16years... However, in the new National Paediatric Hospital, these admission practices must change in line with the definition of children under the UN Convention on the Rights of the Child [0-18 years], the EACH [European Association for Children in Hospital] Charter and in line with Government policy and recent Irish Legislation.”

If all 16 and 17 year olds requiring inpatient admission were to be admitted to the NPH, the hospital would require an extra 50 beds²⁴. Neither NPH at SJH nor NPH at the Mater made provision for these. Lack of space appears to have significantly influenced this decision.

9. Demographics of Child Population

Future demographic pressures and population growth and its impact on the health system must be considered when planning Ireland’s healthcare.

The Dolphin Group report²⁵, states:

“The NPH site investigation should take into account the location of the children if the focus is to be on the best service for children”

Ireland’s Child Population

There were just over one million children living in Ireland in 2011 according to the CSO. The number of children in Ireland increased by 10.9% between 2006 and 2011, with the number of 0-4 year olds showing a larger increase (17.9%). This compares to an increase of 8.2% in the general population during this period. Within the European Union (EU), Ireland has the highest proportion of its population who are children, 25% compared to an EU average of

<https://www.hse.ie/eng/about/Who/clinical/natclinprog/paediatricsandneonatology/modelsofcare/ExecutiveSummaryfinaldraft.pdf>

²³Submission to the Executive and Board of the National Paediatric Hospital, Children in Hospital Ireland available at <http://yoobyoo.ie/system/assets/24/original/submission-from-chi-to-the-executive-and-board-of-the-national-paediatric-hospital-2009.pdf>

²⁴RKW High Level Framework Brief for the National Paediatric Hospital, pages 4, 48

²⁵Review group on the National Children’s Hospital, Dolphin Report June 2012, appendix 5 A note on Planning Context available at http://health.gov.ie/wp-content/uploads/2014/08/Dolphin_Full-Appendices-1-5.pdf



19%. There were 69,267 births in Ireland in 2013...Irish birth numbers and rates peaked between 2008-2009 and a reducing trend has been evident since then.

Ireland's Child Population in the Greater Dublin Area (GDA)

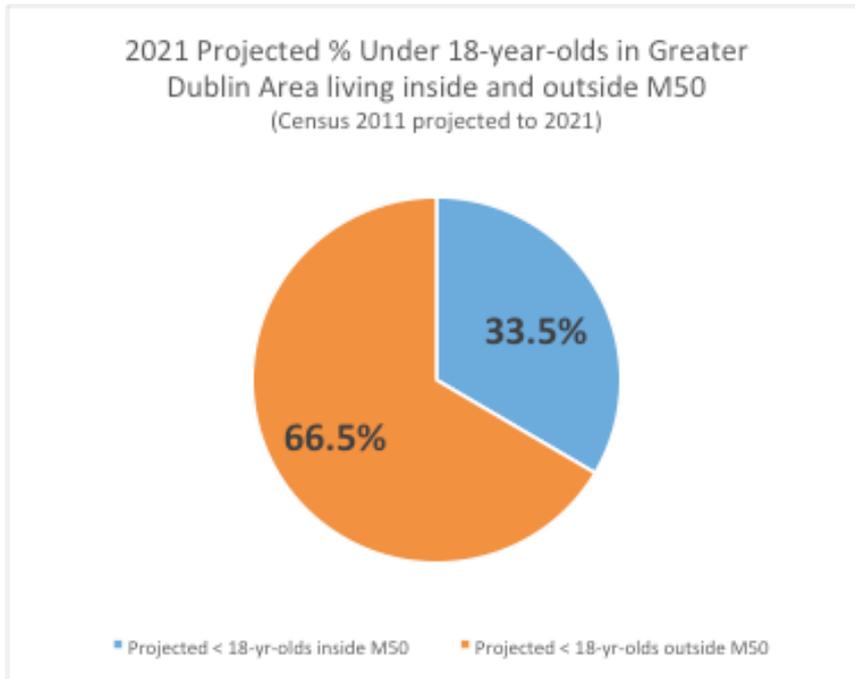
Child Population in the Greater Dublin Area relative to the M50 (Census 2011)

< 18 years old			
County	Pop Inside M50	Pop Outside M50	Total Pop
Dublin City	95,295	0	95,295
Dún Laoghaire-Rathdown	36,297	8,664	44,960
Fingal	0	75,795	75,795
South Dublin	16,135	55,074	71,208
Kildare	0	59,449	59,449
Meath	0	53,400	53,400
Wicklow	0	36,444	36,444
Total	147,726	288,825	436,551
Total %	33.8%	66.2%	

< 18 years old			
County	Pop Inside M50	Pop Outside M50	Total Pop
Dublin City & County	147,726	139,532	287,258
Mid-East Counties	0	149,293	149,293
Total in GDA	147,726	288,825	436,551

< 16 years old			
County	Pop Inside M50	Pop Outside M50	Total Pop
Dublin City & County	131,618	127,609	259,227
Mid-East Counties	0	136,104	136,104
Total	131,618	263,713	395,331

Note: Mid –East counties are Meath, Kildare and Wicklow



These figures demonstrate that two thirds of the current and projected paediatric GDA population requiring secondary and tertiary care reside outside the M50.

Demographics: Satellite Units providing Urgent Care for GDA children

The Emergency Department at the NPH will serve both urgent care and emergency patients.

Satellite units - these deliver urgent, but not emergency, care and certain outpatient clinics during restricted hours. They will be closed at night, will have no inpatient beds, will have 6-8 observation beds and will not receive ambulances.

The NPHDB in its planning application August 2015²⁶ states:

“Northside Satellite Location

Connolly Hospital, Blanchardstown offered advantages over Beaumont Hospital in relation to the development of the Satellite Centre including less need for enabling work; shorter programme; lower capital cost; lower risk; and less impact on future

²⁶NPHBD Planning Application, EIS, Chapter 4 Examination of Alternatives, section 4.3.10 “Satellite Centres Review of a Plan for the Ambulatory and Urgent Care Centres”



development potential. Locating at Connolly would result in a Paediatric Population of 99,401 within a 30-minute travel time zone, with 43.6% classified as experiencing deprivation and 22.1% experiencing moderate to high deprivation.”

“Southside Satellite Location

A southside Satellite Centre, based at **Tallaght Hospital** would have a catchment of 99,481 children of whom 38.5% are classified as experiencing deprivation and 19.4% as moderate to high deprivation.”

“St. James’s Location

The corresponding main hospital catchment zone would take in a paediatric population of 75,157.” [Deprivation level not stated]

The NPHDB application to ABP quotes the <16 year olds population for the catchment area of the two satellites and the NPH as 274,039. The total population of <16 year olds of Dublin City and County alone is 259, 227 and of Kildare, Meath and Wicklow is 136,104. Most of the paediatric population of Kildare, Meath and Wicklow therefore seems unaccounted for in the planning application. It is unclear where these children are expected to attend.

Demographics of Tertiary and Secondary patients

The remit of this new children's hospital is to meet the healthcare needs of all of the children requiring Tertiary care from the Republic of Ireland (i.e. those with the most severe illnesses such as cancer, congenital heart disease, serious blood disorders, major disability) and some of the tertiary care children from Northern Ireland. The hospital will also deal with the tertiary and all inpatient secondary healthcare needs of children living within the Greater Dublin Area (GDA).

In relation to secondary care for children in the GDA, the 2011 census shows that only 35% live inside the M50 (most of whom live close to the M50) and 65% live outside. According to CSO projections, that latter figure will only increase.

Tertiary patients are heavy users of hospital care. Although the number of children requiring tertiary care is relatively small, because of the severity of their illness, their stays are longer and hospital attendance is more frequent. They travel by car – 75% of them from outside the M50. They wish to stop at the M50. Also, many children living inside the M50 live in suburbs close to the ring road and can more easily access the M50 than the city centre. Figures for OLCHC demonstrate that they account for over half of all day case admissions and over a third of all inpatient admissions.

The reason that C4KH has had over 60,000 signatures and that 19 county councils around the country support our call for the M50 site is particularly due to concern for these children.



Citizens who signed understand the needs of these children and their families. Tertiary care children are our most vulnerable children, they and their families require our special respect, support and care. They are not receiving it by building their hospital at SJH.

C4KH fails to understand why the NPH should be built in the area of lowest paediatric population. Given that the SJH offers no clinical advantage for children C4KH recommends “flipping” the sites, that the satellite currently proposed for Blanchardstown should instead be at St James’s and the main NPH should be at Connolly Hospital, if “ the focus is to be on the best service for children” in keeping with the Dolphin Report.

10. Maternity hospital co-location

Maternity - the Essential and Primary Co-Location Hospital

The advantages of Maternity and Paediatric hospital co-location are extensively referenced in medical literature²⁷. Co-location of the NPH with a full-service maternity hospital is essential, and for children is much more important than co-location with an adult hospital. Obviously sick mothers require co-location with an adult hospital, therefore tri-location of hospitals is best.

Neonates make up a significant proportion of paediatric ICU admissions. Thirty per cent of all paediatric ICU (PICU) admissions to OLCHC and Temple St. Hospital ICUs are newborn babies and 50% of emergency PICU admissions are newborns. Of newborn babies admitted to PICU 50% are from Dublin maternity hospitals and 50% are from other maternity hospitals. 530 critically newborn infants are transferred per annum by the Neonatal Retrieval ambulance service from maternity services nationwide to tertiary paediatric hospitals in Dublin²⁸.

The following are just some of the many examples of experts stating the primary need for co-location with a maternity hospital:

1. A letter from consultant neonatologists in the Coombe Women and Infants University Hospital, to the Chairman of the Task Group in March 2006 stated

²⁷References listed in the New Children’s Hospital Alliance Submission to An Bord Pleanála PA0043 October 2015 accessible through <https://mega.nz/#!KxAjhRgZ!B5-ZE74ENrZAUsWm6fhXgJH14SdM8dWmWe446WOpK44>

²⁸From Coombe Women and Infants University Hospital submission to the Dolphin Group (p4), April 2012, (received by the New Children’s Hospital Alliance, a C4KH member, under FOI)



“We must emphasise that **on-site** ... ‘corridor distance’ ...maternity tertiary service provision is of the utmost importance in any co-location model if we are to put children first”²⁹

2. A submission from the Board of Directors of OLGHC (Sept. 2006) to the DoHC/HSE ‘Transition Group’ emphasised the paramount importance of co-location

“The new Children’s Hospital **must be co-located with a full-service maternity hospital**” including high risk/tertiary neonates. Co-location in this context means an intimate physical adjacency – no more than the width of a corridor --between maternity and paediatric services with neonatal intensive care forming the service bridge between the two. Such a co-location will eliminate the transfer of very sick neonates between hospital sites and speed intervention by the multi-disciplinary paediatric team. *It will effect a lasting improvement in neonatal morbidity and mortality*, benefits which have been demonstrated in well-researched submissions by many obstetric and neonatal consultants. *They are of such a magnitude that the Board believes the maternity component of development should proceed simultaneously with the new Children’ Hospital.*”³⁰

The DoHC/HSE Transition Group 'disappeared' without producing any reports when Minister Harney signed the National Paediatric Hospital Development Board into law in SI 246 in May 2007 on the eve of the General Election.

3. A submission to ABP (Sept 2015) signed by fifteen senior consultants working in Critical Care in Temple St and OLGHC stated:

“We, whose daily practice involves caring for critically ill neonates, unreservedly support the need for a single, national children's hospital, and are willing to compromise on many fronts to achieve this goal, acknowledging that no site is ideal.

Co-location with a physically linked maternity hospital is, in our expert opinion, non-negotiable. We are unwilling to endorse a national children's hospital on a site that cannot accommodate this truly critical adjacency. To do so would be to fail those

²⁹Letter dated 31 March 2006 the Chairman of the JointHSE/Department of Health and Children Task Group [on the optimal location of the National Paediatric Hospital] – received by NCHA under Freedom of Information Act.Signed by Dr Eugene Dempsey, Dr Pamela O’Connor, Dr Margaret Sheridan and Dr Martin White

³⁰“ A world class tertiary Children’s Hospital for Ireland” Submission to “Transition Group” by Board of Management of Our Lady’s Children’s Hospital Crumlin, September 2006, available at <http://thenewchildrenshospital.ie/wp-content/uploads/2011/08/A-world-class-Tertiary-Childrens-Hospital-for-Ireland.pdf> Our italics



infants whom we are entrusted to protect. *To proceed with such a project will result in the avoidable death or disability of many new-born babies for years to come.*³¹

As part of its planning application the NPHDB submitted a Draft Site Capacity Study, (no Masterplan was submitted), to ABP, August 2015. It states that building a maternity hospital on the St James's site linked to the children's hospital would require the adult Outpatient building (18 years old) to be demolished and its services relocated, and a new adult Emergency Department, a new ICU and a new Facilities Management hub for the adult hospital to be built³².

C4KH holds that such an undertaking defies common sense, would be prohibitively expensive and unlikely to be deliverable within any reasonable timeframe.

When ABP made its decision to approve the St James's site in April 2016 it stated that from its perspective the maternity hospital and the NPH "were not inter-dependent projects"³³. It is not in ABP's brief to take responsibility for health policy decisions. The responsibility for such policy lies with the Minister for Health and the Cabinet. Neither the Minister nor the Cabinet have responded to the experts' concerns expressed above.

Cabinet presented the wrong hospital to An BordPleanála. It is the responsibility of the cabinet to change the location.

While we await a corridor-linked maternity hospital avoidable deaths in children will, according to the experts, continue.

It is therefore imperative that the Minister for Health and the Cabinet are made fully aware by this Committee that the responsibility lies squarely on their shoulders. It is the responsibility of the cabinet to change the location and prevent avoidable deaths. Co-build of the NPH and the Rotunda is easily achievable, less disruptive and more cost effective at Connolly. A masterplan for the development of Connolly embracing all these elements should be immediately drawn up.

³¹ Written submission dated September 2015, from 15 consultants from Department of Cardiothoracic surgery OLCHC, Department of Cardiology OLCHC and Joint Department of Paediatric Intensive Care Medicine OLCHC and The Children's University Hospital, Temple Street, from the PA0043, available at -Home page, Post dated 8Sept 2016 www.thenewchildrenshospital.ie or

https://mega.nz/#!6hxWALib!AJQxqtgBmagyPqMvsOV_uG0rI4hyWy7TBWY5L0xfHPk

³² NPHDB St James's Campus- Draft site capacity study available at <http://www.nchplanning.ie/wp-content/uploads/2015/07/3a-St-James-Campus-Draft-Site-Capacity-Study.pdf>

³³ Inspector's Report 3.1.1.9 PA 0043



11. Workforce Planning, Recruitment and Retention

McKinsey notes that

“Successful centres place a great emphasis on recruiting and retaining outstanding staff. This is especially important in paediatric medicine where the opportunity to contribute to exciting work is a powerful motivator. Looking forward, this will be critical given the ongoing shortages of key personnel (for example the well observed shortage of nurses in the UK and the US) and the continuing requirement to develop more specialised multi-disciplinary teams”³⁴.

In 2006, the Board of Management at OLCHC produced a report entitled “A World Class Tertiary Children’s Hospital for Ireland”. In relation to the design values, the report said that

“It is also important to note that many of the design features that help relieve patients stress also relieve caregivers stress. Car parking facilities for staff, access to gardens and courtyards, are all examples of facilities which support the design of healthcare facilities which demonstrate respect for staff needs and value loyalty, recruitment and retention”³⁵.

Allowing the NPH to function and to achieve international excellence is dependent on attracting, developing and retaining high quality staff. It beggars belief that no workforce planning for the NPH has been undertaken. Nursing recruitment given the central role nurses play in delivering excellence in -patient care is a case in point. A range of factors, including in particular the recognised shortage of appropriately trained paediatric nursing staff world-wide, will impact the NPH’s capability to be competitive in attracting, developing and retaining high quality staff to meet current and future staffing needs.

Recruitment of specialist paediatric nurses remains a significant challenge for a number of reasons. English speaking criteria have become stricter of late adding to recruitment difficulties. In OLCHC there are currently nursing shortages in many specialist areas leading to a reduction in services. Examples include:

- Haematology/Oncology. Total of 60 nurses – 6 vacancies
- Theatre total of 88 nurses - 8 vacancies – theatres closed
- Intensive care unit – 28 vacancies – 4 beds closed out of 25 due to staff nurse shortage.

³⁴McKinsey Report Children’s Health First February 2006 page 23

³⁵Our Lady’s Childrens Hospital Crumlin A world class tertiary children’s hospital for Ireland page 18 available at <http://thenewchildrenshospital.ie/wp-content/uploads/2011/08/A-world-class-Tertiary-Childrens-Hospital-for-Ireland.pdf>



It is proposed that there be 62 ICU beds in the NPH – recruitment will be a major problem.

The following is from a recent Paediatric Intensive Care Audit Network for the UK and Ireland, 2015.

“Some of the data from the latest November Staffing Survey makes sobering reading and should be an area for attention. In 2014 there were 383 funded intensive care beds, 73 funded HDU [high dependency unit] beds (in the UK and Ireland) and the PICS Standard on nursing numbers per bed (Standard 164 – 7.01 WTE/bed) was only met by 14.3% of units (n=5). This figure was 28.6% (n=10) when using the 2001 Standard (6.4 WTE/bed).”

A shortage of theatre nurses results in the closure of operating theatres and a postponement of surgery. A shortage of intensive care nurses also results in a postponement of operations because of the inability to staff the necessary intensive care beds post-operatively. Many highly trained, specialist nurses currently commute from satellite towns where existing public transport is extremely poor, especially for those on shift work, because they cannot afford Dublin house prices.

The absence of adequate onsite parking at SJH will undoubtedly further hinder staff recruitment and therefore significantly impact on the functioning of the hospital. Staff at OLCHC will provide the largest pool of paediatric expertise for recruitment to the new hospital. Currently, staff reside in a geographical distribution which reflects the location of OLCHC. That distribution is strongly biased to South and South-West Dublin and into parts of Wicklow and Kildare. Over time this pattern might adapt to reflect the location of the NPH but in the short and medium term and unless the price of housing in Dublin significantly reduces, it is likely that many staff will be faced with a longer journey to a new location, a journey which is not convertible to walking or cycling. Pending major improvements to the public transport infrastructure of the GDA, most of which are many years in the future, there needs to be adequate provision for parking for private cars which will remain a popular and mostly unavoidable choice for many.

C4KH notes that there was no staff consultation regarding choice of the location of the hospital.

12. Major Trauma Centre

The NPH will be the country's Major Trauma Centre for children. As the NPH is the only hospital with a Children's Emergency Department and the only hospital with inpatient beds for children in the whole of the GDA, it is essential that it is accessible by ambulances and helicopters at all times. An emergency Major Incident event in Dublin city might easily challenge the accessibility of a NPH at St James's, an area already susceptible to gridlock. No Major Incident Plan has been developed.



Co-location of adult and paediatric Major Trauma Centres offers certain advantages for Major Incident planning (for example a ground level helipad to receive Sikorsky Helicopters with multiple casualties). However, the location and distribution of tertiary adult services across metropolitan Dublin is “fragmented”³⁶. This has meant that there was no obvious co-location partner for the children’s hospital.

In March 2012 the offer by the National Sports Campus to give 90 acres to the adjacent Connolly campus has made that hospital emerge as the obvious co-location partner for the NPH. Its sister hospital Beaumont has the most specialties relevant to paediatrics as identified by the Task Group on NPH Location (eg neurosurgery, cochlear implantation and renal transplantation), and could transfer them to Connolly. As the inevitable rationalisation of Dublin adult hospital services occurs and as current adult facilities require modernisation, other, trauma related, adult services could transfer to Connolly.

The accessible Connolly campus, adjacent to the M50 and its hard shoulder, and which allows for a ground helipad, adequate parking and future-proofed expansion space, is the logical choice for Dublin’s first ever Major Trauma Centre.

13. Value for money

Both the NPH Independent Review’s Financial Analysis(2011)³⁷ and the Dolphin Report (2012)³⁸ state that a greenfield site would be **25% cheaper** to build on than an inner city site. The further demolition and rebuild of the adult St. James’s to facilitate an on-site Maternity hospital suggests a profligate attitude towards resource allocation. Any future expansion on this tight urban space would also generate extra construction cost. Building the NPH at Connolly Hospital would not only recoup the sunk costs of the Mater and James’s sites but money saved could be put towards the co-build of the new Rotunda Maternity Hospital, corridor-linked to the ICU of the NPH. This would be putting children first.

Faster, more cost-effective at Connolly

C4KH believes that the Connolly site could be developed more cheaply, by at least €190M, and more quickly than continuing the project at St James’s. Figures received³⁹ estimate the following:

³⁶National Paediatric Hospital Independent Review DoH, 2011, available at <http://health.gov.ie/blog/publications/national-paediatric-hospital-independent-review/>

³⁷DoH National Paediatric Hospital Independent Review’s Financial Analysis available at <http://health.gov.ie/blog/publications/national-paediatric-hospital-independent-review/>

³⁸Appendix 4 “ Greenfield and urban sites: background note on the cost issues” available at http://health.gov.ie/wp-content/uploads/2014/08/Dolphin_Full-Appendices-1-5.pdf

³⁹Data received from Mr James Sheehan, Member of Connolly for Kids Hospital



Departments currently on St. James' site requiring demolition and relocation to accommodate the National Paediatric Hospital

Site to south-west of current through-road (approx. 2.44 hectares)

To be demolished/relocated:-

- Staff car park
- Hospital 7
- General support services
- Victorian Church
- Physiotherapy Department
- Speech and language therapy
- Veins Unit
- Rheumatology day unit
- Chemotherapy compounding unit

Site to north-west of current through-road (Approx. 2.42 hectares)

To be demolished/relocated:

- Facilities management
- National Haemophilic centre
- Centre for advanced clinical therapeutics
- Haematology laboratory
- Hepatology unit
- Housekeeping
- Information management services
- Laboratory medicine
- Laundry
- Private clinic
- Ambulance Centre

Thus total site for NPH is **4.86 hectares**

Departments currently at St. James's requiring demolition / relocation to accommodate a relocated Maternity Hospital

If the Maternity Hospital is added to the site, 1.26 hectares will be made available, requiring demolition/relocation of:

- Adult Outpatients Department
- Current ICU Department
- Adult A/E Department.



(Note that the existing Coombe site stands on 3 Hectares)

ESTIMATE OF COST (2016) of the NPH if built at Connolly

Construction cost = €400M

Hospital 118,000 metres square @ €3000 per metre = **€354M**

Family accommodation 4,000 metres square @ €2,000 per metre = **€8M**

Research Department 3,000 metres @ €2,500 per metre = **€7.5M**

Two satellite units - 10,000 square metres @ €3,000 per metre = **€30M**

ADD Vat, Fees, fit-out and equipment @ app. 50% of construction Cost = €200M

TOTAL = €600 M

(Information Technology costs alone are estimated at app. €70M. Thus this figure is very conservative)

Estimate of Extra Cost if NPH is built at St. James's in Dublin City Centre

- Decanting and replacement of 21 departments, approx. = **€100M**
- Sewer Diversion = **€18M**
- Premium for Inner city construction 10% of construction cost = **€40M**
- Underground car parking. Three levels. = **€30M**
- Roof helipad fire proofing **€2M**
- Dust protection, inflation, interest, contingency etc.?? Cost

TOTAL EXTRAS= € 190M ++

Thus **total projected cost (€600m+ €190M) for St. James's site at current prices (2016) = €790M**

TIME FRAME

NPH at Connolly Hospital

- **Redesign**

Utilising the work already achieved with departmental proximities, areas required etc. a further period of 6 months is required.

- **Planning application to ABP**

Three months if unopposed. Six months assuming objections.



- **Construction**

Fast track Programme - 24 months

- **Commissioning**

One month

Total Time from the “Proceed” date to Opening = **3 years**⁴⁰.

14. Polluted site

It is estimated that there are in the region of 40,000 premature deaths each year in the UK as a result of air pollution. Despite claims to the contrary, the data presented in the NPHDB’s Environmental Impact Statement (EIS) and in the Statement presented by TMS clearly shows that the EU Air Quality Standard for nitrogen oxides (NOx) is exceeded in the St James Location⁴¹. Even the Applicant’s own EIS agrees that this standard is exceeded. The more stringent non statutory but obviously very relevant guidelines of the World Health Organisation will be greatly exceeded at this location, where the sickest children in the country will be cared for, especially for PM2.5 (see below).

The NPHDB also claims that existing levels of nitrogen oxides (NOx) are higher at Connolly Hospital than they are at St James’s Hospital based on a nearby EPA recording station. That claim is also incorrect. The Blanchardstown Air Quality Monitoring location is right beside the N3 carriageway and within the zone of influence of the extremely significant M50/N3 junction. There is nowhere else in Ireland, with the possible exception of the middle of the Red Cow Junction, with higher NOx levels in ambient air. This EPA measurement location is approx 300m away from the closest building on the Blanchardstown Campus and therefore is not an appropriate description of air quality at the hospital. The station measures air quality associated with traffic and since the traffic pollutants reduce in concentration within about 10 metres of the carriageway, the levels will have reduced to background levels at 300 metres distance. TMS Ireland Ltd. have carried out measurements on the Blanchardstown Campus and air quality there is unpolluted and representative of a rural location and not a major roadway. Air pollution can produce profound adverse effects on the health of two populations in particular – the young and the elderly. The World Health Organisation website informs us that

“Long-term exposure to PM2.5 is associated with an increase in the long-term risk of cardiopulmonary mortality by 6–13% per 10 µg/m³ of PM2.5. Susceptible groups with pre-existing lung or heart disease, as well as elderly people **and children, are particularly vulnerable**. For example, exposure to **PM affects lung development**

⁴¹Air quality impact assessment of proposed national children’s hospital at St James’s Hospital Campus, James’s street, Dublin 8, TMS Environment Limited, October 2015, Submission to ABP PA 0043 Available at https://mega.nz/#!vo4CyKQA!vhMhVo-csnxuoSbabSRsdVn5_qYBVc6B5btbyenRIg



in children, including reversible deficits in lung function as well as chronically reduced lung growth rate and a deficit in long-term lung function. There is no evidence of a safe level of exposure or a threshold below which no adverse health effects occur.”⁴²

Placing our sickest children in such a polluted environment clearly is not in their best interests.

In the past week, new analysis of UK government statistics by researchers at the charity Children with Cancer UK found that there are now 1,300 more cancer cases a year compared with 1998, the first time all data sets were published⁴³. This represents an increase in the incidence of childhood cancer of 40 per cent in the past 16 years because of air pollution, pesticides, poor diets and radiation, scientists have warned. The rise is most apparent in teenagers and young adults aged between 15 and 24, where the incident rate has risen from around 10 cases in 100,000 to nearly 16. Researchers say that although some of the rise can be explained by improvements in cancer diagnoses and more screening, the majority is probably caused by environmental factors.

Dr Denis Henshaw, Professor of Human Radiation Effects at Bristol University, the scientific adviser for Children with Cancer UK, said **air pollution was by far the biggest culprit**, accounting for around 40 per cent of the rise, but other elements of modern lifestyles are also to blame.

15. No parkland space

Steve Bracks, Premier of the State of Victoria, Australia, announcing the site for the new Royal Melbourne Children’s Hospital at the 280-acre Royal Park (Opened 2011).

“Parkland provides one of the most powerful forces in lifting a child’s spirits and aiding recovery and the new hospital will be flanked by open space on three sides.”

The new stand-alone Alder Hey children’s hospital on the 24 acre Springfield Park in Liverpool – “Rebranded as ‘Alder Hey in the Park’ ...the parkland will be used creatively as an integral part of the ‘clinical space’, to deliver rehabilitation to our patients”. (Opened October 2015)

The proposed, site-constrained, new NPH at St. James’s will have no ground level gardens. Its “roof top” garden is in a central well, and in two sections on the roof of the 4th floor of the hospital, completely surrounded by a further three storeys of the hospital.

⁴²Health Effects of Particulate Matter- World Health Organisation, 2013 page 6 available at http://www.euro.who.int/__data/assets/pdf_file/0006/189051/Health-effects-of-particulate-matter-final-Eng.pdf

⁴³<http://www.irishtimes.com/news/world/uk/childhood-cancer-cases-in-uk-have-risen-by-40-since-1998-1.2778942>



Connolly Health Campus by contrast would plan to build the NPH on 16 hectares with the remaining land (circa 20 hectares) designed to provide a parkland setting⁴⁴

Finally, we would wish to end this submission to the elected representatives of the people of Ireland in the Oireachtas with a tribute to the wonderful support from so many families, ex-patients, individuals, healthcare staff, county councillors, many politicians and journalists all over the country who share our vision.

A petition signed by over 60,000 citizens requesting the Taoiseach to consider moving the NPH to the Connolly campus was handed in at the gates of Government Buildings on the 22nd June 2016⁴⁵. An email to C4KH on 24th June from the Taoiseach's private secretary acknowledged receipt of same and stated "Your petition has been brought to the attention of the Minister for Health, Mr. Simon Harris, T.D". Sadly, C4KH has not received even as much as an acknowledgement of receipt of this petition from the Minister.

Signed

Dr. Fin Breatnach

C4KH spokesperson

087 256 9138

Dr Róisín Healy

C4KH spokesperson

086 602 0601

Aisling McNiffe

The ExtraSpecial Kids Group

C4KH spokesperson

Aaron Daly

Parent

C4KH spokesperson

⁴⁴Connolly Health Campus, National Paediatric Hospital Proposal available at <http://thenewchildrenshospital.ie/wp-content/uploads/2012/06/Connolly-NPH-summary-proposal.pdf>

⁴⁵Copy of the letter is posted on the New Children's Hospital Alliance website –5th Sept 2016

<http://thenewchildrenshospital.ie/>



LIST OF ABBREVIATIONS

ABP	An Bord Pleanála
C4KH	Connolly for Kids Connolly Hospital
CHGB	Children's Hospital Group Board
DATH	Dublin Academic Teaching Hospital
DCC	Dublin City Council
DoHC	Department of Health Children
EPA	Environmental Protection Agency
GDA	Greater Dublin Area
ICU	Intensive Care Unit
NICU	Neonatal Intensive Care Unit
NOx	Nitrogen Oxides
NPH	National Paediatric Hospital
NPHDB	National Paediatric Hospital Development Board
OLCHC	Our Lady's Children's Hospital Crumlin
PICU	Paediatric Intensive Care Unit
SJH	Saint James' Hospital