A Guide to Creating a Dementia Friendly Ward in the Acute Setting

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GENIO

Community Hospital Patients Families
Cork IDEAS project
Integrated Dementia Care Across Settings

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Introduction

As an Occupational Therapist and having worked with patients with dementia in my previous job I was delighted to have the opportunity to be involved in Genio funded Cork IDEAS Project and in particular in the environmental change for dementia at the Mercy University Hospital. Like all new projects, it didn't come without its fair share of trials and tribulations and although the work is on-going the results so far have been worth it.

I am hoping this booklet will give other hospitals & care facilitates valuable information when considering environmental change for dementia.

Budget

- Budgeting is essential in the development of any project. It helps you manage money effectively, allocate appropriate resources to areas of the project, monitor performance, identify realistic objectives and improved decision making.

- Therefore it is vitally important that your budget is properly approved and signed off before commencing a project so enable you to establishing what is realistic in terms of the changes you can make.

- One of the valuable lessons we learned from costing was that it is essential to receive quotes from several suppliers, however often going with reputable rather than a low cost supplier was far more cost effective in the long run. Using suppliers that had existing links with the hospital was also cost and time effective.

Record Keeping

Organisation is the key to any project therefore it is fundamental to keep a detailed and updated weekly log (hard back book) – which should include:

- Meetings/interactions/ emails
- Work in progress/hold ups and why
- Extra Costing
- Achieving deadlines/or not and why
- Research update

Review progress at end of each week and after each meeting try to do your action plan straight away i.e. send e-mails/ phone calls etc highlighting the action plans and keeping everyone informed and up to date.

Research

Looking at evidence-based projects is crucial in guiding the project. The Stirling University Dementia Portal and The Kings Fund are good starting places. (Please see comprehensive list of references at the rear of this manual – Appendix 1). It is also advisable to visit sites that have already made some changes see examples that Occupational Therapist visited to guide this project below

- Clonakilty Hospital, Co. Cork.
- St. Luke's nursing Home, Blackrock, Co. Cork.
- Carrigoran House, Newmarket-on-Fergus, Co. Limerick.
- Memory resource Room – Crystal Project, Mallow.
- Mental Health Unit at CUH

You could also seek out experts in the field of Dementia in your organisation or locality i.e. Doctors, Nurses, and Therapists etc and get some tips and advice from them.

Building Relationships

Building good relationships can be the difference between outstanding success and dismal failures, it is all about getting people to trust and believe in you. It is easy to have good relationships when everything is running smoothly but relationships really count when a project start to come undone. Therefore it is important to:

- Aim to build strong relationships early on with the key decision makers. Regularly meet and Listen to them, get them involved and consult with them so that their concerns can be voiced, while at the same time take the opportunity to re-emphasise the benefits of the change – this will be vital when trying to get decisions approved.

- Share your early project plans, as these will show you have a structured approach which will help build confidence in you.

- Having visual examples of what you are trying to achieve, as this is helpful in explaining the reasoning behind the decisions.

- Share your vision of what success will look like and give a 'big picture 'view of where you are heading. Ensure that everyone is kept up-to-date and the different priorities are understood.

- Seek advice and assistance from more positive stakeholders on how best to manage and influence anyone who is not as receptive.

- Keep your communications simple and highlight key milestones and successes that have been achieved.

- Give presentations to groups on a regular basis – i.e. hospital staff, volunteers, trades people, sponsors etc, I cannot stress enough the importance of this. It is an effective way of getting everyone involved as well as informing them on what is happening and what is about to happen, whilst at the same time gathering valuable feedback from the people working on the ground, after all, it has to be work friendly as well. It also gave me an opportunity to educate people about dementia and the importance of these projects as well as stressing how important fundraising is. Some of the best ideas came from these presentations.

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- Find out if there are any works planned for the area that you are developing and attempt to postpone these as this can be a waste of time & money if you are repainting etc.

Involving external agencies

An Occupational Therapist understands the link between the patient with dementia, their environment and how they may function within this environment. However, colour and design etc may not be an area of expertise; in this case a local Third Level Education department were contacted for advice as outlined below:

Cork School of Architecture – Two students donated both their time and expertise to this project. They assisted with the selection of colours and flooring. They also came up with ideas for outdoor areas that although not accessible to patients, were within view of the ward.

Cork Institute of Technology – Third Year Woodwork class donated two Bird tables for the area outside the windows of the ward.

Local Businesses – Various local businesses were approached and they either donated or gave generous discounts on items that would have otherwise had to be purchased i.e. Furniture, record player, radio, sensory items, clocks etc.

Schedule of Works

This is where the fun begins... in paper it might look like everything is rosy however in reality it can be a completely different story. Here is where it all needs to come together i.e. budget, research and good working relationships. Always be prepared for the unexpected, especially in a hospital environment where you have to also consider infection control, insurance, patients safety etc. Therefore you should try to:

- Check with the appropriate people in management to obtain authorisation prior to commencing any work.

- Capture the environment before any work commences. Take pictures and ensure you have a baseline to work from. This also helps in presentations etc and showing the differences before and after.

- Establish a practical wish list, keeping in mind that the area involved has to also work as a functional work place. This process can be time consuming but very important. It may involve going back and forth between the Project Team, Development Team, Ward Management and Suppliers to identify what is feasible and achievable from a risk/structural/financial and time point of view. Listening skills and good relationships are very important.

Environmental Changes: Reasoning & Process Flooring

Flooring was by far the most costly and demanding part of this project. Suitable flooring is quite expensive and an added expensive was (as it was a ward) the time scales in which to get it done. Patients had to be relocated to another ward for three days with various teams involved i.e. Nursing, IT, Porters, Development, Maintenance and lots of collaboration between the suppliers, ward mangers and nursing managers

Before selecting the flooring, we:

- Consulted with the School of Architecture students
- Looked at what was used in other Dementia units
- Referred to the research
- Consulted with the flooring company (Harbour Flooring) infection control and the hygiene team

Light Wooden Lino was selected - reasons being:

- No block colours/designs etc which can be confusing for patients, with dementia, e.g. blocks of colour changes can be perceived as steps
- Acoustically absorbent properties
- Non-glare as this can be confusing for patients
- Padded to ensure reduced risks/injury from falls
- It would give a domestic and homely feel to the ward
- It would fit in with the existing décor
- It was light and neutral and would brightened the ward and ensure a spacious feel

Things to note: Research states that there should be a clear differentiation between the floor and the wall e.g. having the skirting board a different colour from the floor and the wall - this wasn't possible in this case due to hygiene standards within a hospital setting as the skirting has to come up the wall approximately 3".

Other ideas that were considered included having a different block colour at areas that were not accessible to patient's e.g. using a block colour at the entrance to the nurse's station to prevent patients from coming into this area. This was discussed with various stakeholders and we decided against this as patients were not regularly coming into this area & it would have been an additional cost. This idea could be used in other areas to prevent patient going to particular areas as changes in colour can be used positively to stop patients entering areas.

Flooring – before (note troublesome blocks of colour)

The flooring was the most expensive change that was made to the ward.

Flooring – after (no colour changes)

Orientation

Various orientation ideas were considered but not trialled for the following reasons. These maybe better suited to residential or nursing home settings.

- White boards behind each bedside for patient's name and information – this was felt to breach confidential information.
- Different colour linen for each bedside – this was not possible due to stocking, additional work for nursing staff and expensive.
- Personalising bedsides by bringing familiar items to the patient e.g. a dressing gown and/or a blanket this would orientate the patient to their bedside put in the patient information booklet to educate families and careers
- Knitted blankets were donated to the ward but due to infection control standards we were unable to use.
- Whiteboards with the date and place etc were considered this was thought to add to nurse's already busy workload and if not kept u-to-date could cause more disorientation.

Signage

The evidence suggests the following in relation to signage – please see pictures below:

- Signs should be large, bold and distinctive.
- At eye level and use words and pictures (120mm high – recommended by Stirling University).
- Text in lower case with first letter capital letter - see picture below.
- Contrast with background is recommended and black on a yellow background is suggested as the best contrast for patients with dementia and this applies to others also such as the visually impaired.
- Include a picture of e.g. toilet, so that patient's that cannot interpret the words can hopefully interpret the picture – see pictures below.
- Consistent sign throughout the unit/hospital.
- Patients should be able to see a toilet sign from their bedside.

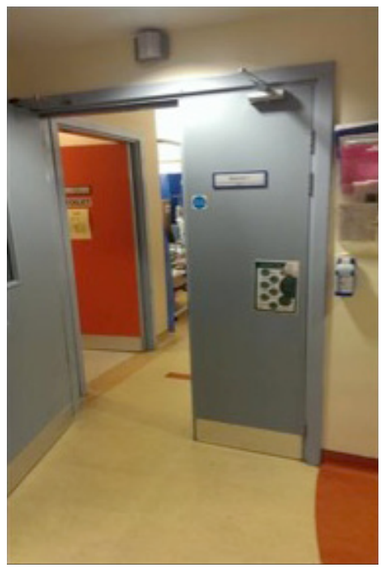
Things to consider

How signage fits in with existing hospital signs, logos and colour scheme & fire signage has to be considered. MUH's colour scheme is navy on cream which is a relatively good contrast but for the geriatric ward (project) authorisation was obtained in writing to be excluded from using Irish and also the MUH logo and colour scheme.

At MUH the hospital's Signage Company (Edmar signage) designed a prototype (size/pictures/text/font etc) first. Having this to show the various stakeholders was useful in conveying what was necessary and how it would fit in with existing signage.

Room Themes

Research suggests that using objects or ideas that are familiar helps to orientate patients. It was decided in keeping with the natural feel of the ward that a flower theme would be used to help orientate patients to their room. This theme would be age and gender appropriate and would be ascetically pleasing and fit in with existing décor. It is hoped that these rooms will be called by their flower rather than number by staff which will help with the orientation for the patients.



before

after

Note: Both the front and back of the panels of the door had the flower so that when patients were sitting in their chair/in bed they could see the e.g. fuchsia and then associate this flower with their area.

Above: ED Dementia friendly bay – using the forget-me-knot to differentiate this area.

Clocks & Calendars

Research also states that every patient's bedside should have a view of a clock. We put a clock /calendars in all the bedrooms. These cost €160 each and unfortunately were not feasible to have at every location. The clock/ calendars have a boarder to the sides and ideally this would continue top and bottom to ensure clear identification of the boarder for patients but this was not possible - see picture on left below.

The research states that each bedside should be able to see a clock and it was established that there weren't enough clocks on the walls of the wards in the hospital. The clocks that were in situ were framed with a white boarder against a white wall and many of them were up too high and out of the view of the patients. Suitable clocks were selected which cost €27 – pictured right above. They have a black rim around the outside and black numbering. Black on a white face is a good contrast and easy for patients to read the time.

Note: There are a number of different orientation boards and other clocks available on the market. Following consultation with other units and with ward staff it was identified that the clock/calendars that we chose would require no input from ward staff to update etc and they fitted in with flooring and colou8r scheme and were suitable in terms of durability & hygiene for the acute environment.

Using Colour & Contrast

From reviewing the research and the work completed in other units, it was highlighted that the use of colour can be used to highlight areas that patients need to be aware of for example, the toilet and de-emphasise or disguise non-patient areas including sluice rooms, staff rooms and certain exit points.

Doorways/Wall Protectors
On the ward the existing toilet doors on the ward were already an orange colour so changing these was not necessary. The room doors and the wall protectors/ hand rail were a light blue colour and contrast wise were not ideal. However, to replace the room doors (these were fire doors) it would be in the region of €2,000 per door and to replace the existing handrail would cost €4,000. To replace perfectly functioning items was deemed too expensive, therefore after weighing up all the pros and cons these changes were not completed.

Note: For future work as can be seen in MUH's St. Francis' Ward in pictures below, the doors and handrails/ward protectors have been chosen with appropriate contrast so this is something that will be considered in future environments at MUH.

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Wall Protectors

We did use an element of disguising on the ward. To decrease visual clutter for patients, we replaced existing corner guards to cream to blend in with the existing cream walls - see pictures below.

Before

After

Light switches – Using paint to help to contrast (patient only) light switches was trialled and worked well with having a boarder of dark paint around the socket. Mostly light switches are white on a cream background and they may blend in and not be seen by patients – see picture below.

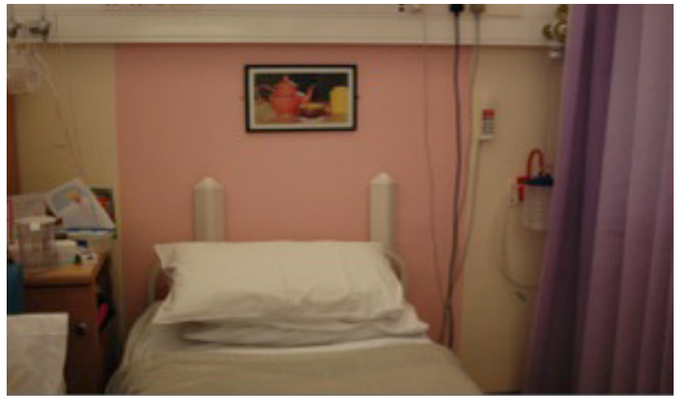
Toilet grab rails – To help with promoting continence and independence for patients with dementia the grab rails were changed to a contrasting colour to the walls & toilet – see picture below.

Before

After

Bedsides (paint & pictures)

Following consultation with students from the Cork School of Architecture a number of colours were chosen for behind patient's bedsides. These colours were neutral and arguably not very striking, but coupled with the pictures it was anticipated it would help with orientation. The choice of neutral colours would add to the calm and airy feel of the ward, as opposed to bright bold colour which would be too loud and over-stimulating for patient's bed area – see pictures below.

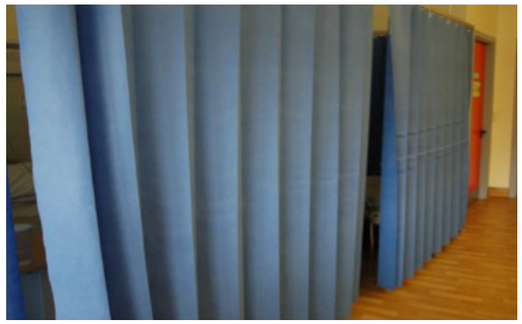


These pictures were picked to work in conjunction with the different coloured paint. They were chosen from shutterstock.com and once an appropriate size (450mm x 10mm with a 10mm border) was identified, these pictures were then sent to a printer and later framed with a back wooden frame to ensure a visual border. The pictures were carefully chosen for male, female and potentially mixed rooms – gender, age, background e.g. country versus city, were all considered in this decision. Please see appendix 6 for a smaller version of the 15 pictures used for each of the 15 bedsides.

Curtains – Disposable curtains are used on most acute wards (cost and infection controls reasons). Disposable curtains come in four colours including lilac, green, cream and blue. It was considered having a different coloured curtain at each bedside but this was thought to be too much work for ward staff e.g. if no lilac curtains in stock & curtains soiled and needed to be changed immediately then the whole colour scheme would be out of sync and therefore prove more confusing to patients.

Instead lilac was chosen for the ladies room and blue for the men's room adding another visual cue to identify the patient's room in conjunction with the flower theme. Please see pictures below.

Female room - lilac curtains



Male room - blue curtains

Seating – Brightly coloured seating was chosen to highlight the chair against the bedside that would enable patients to locate easily – please see example below.

Decluttering

The ward was relocated for the new flooring to be laid & painting to be completed. Therefore it had the advantage of working on a blank canvas as the following was completed before painting;

- All notices and notice boards removed
- All pictures were taken down
- All existing clocks were taken down
- All hand towel holders and soap dispensers were removed.
- Glove & apron holders were removed
- Removed mirrors at staff only sinks

What was completed:

This process was completed in conjunction with ward manager, Occupational Therapist and maintenance team and also with input from the infection control team to cover all perspectives in terms of patients and staff.

- It was aimed to relocate staff only notices/folders etc out of the view of patients e.g. see below where on the left the file holders were moved around the corner and also the monitored leads where tided up.

- Apron and glove holders were replaced by tidier dani-centres.

- All soap dispensers and hand gels were (The hand gel supplier was contacted to see if there were white as opposed to blue holders which would blend in with the white for staff areas but these were not available)

- Any unnecessary clutter was removed and items were put back strategically out of the view of patients where possible.

- The red colour behind the nurses' station was replaces with a green – which is a restful and calm colour and it can also make the room look more spacious.

- All patient areas including soap dispensers and hand towels were fixed at an easy access height and were labelled. Anything unnecessary in these areas was removed including shelves attracting clutter, extra dispensers etc – see before and after pictures.

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Nurses station - before decluttering

Nurses station - after decluttering

Staff sink - before

Staff sink - after

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Noise

Acute settings are noisy places. Noise is a known stressor for people with dementia. Background noise from telephones, machines, trolleys, televisions all increase auditory stimulations as well as the constant flow of people on a busy acute ward.

What we considered and what was feasible.

- Acoustically absorbing panels were considered. However, many of these products are permeable making them an infection control risk. Those which are not are very expensive. The advantages versus the cost were weighed up and it was decided not to go ahead with these.
- The flooring that was picked had acoustically absorbing features.
- The hospital cleaning contract bought a quit vacuum cleaner so this could be used by the cleaner to reduce the volume of noise on the ward.
- Staff education on increasing awareness of the impact of noise on the person with dementia is the most effective way of reducing noise however; it remains a challenger due to the busy nature of the environment.

Simple strategies to handover to staff include

- Close room doors if noisy outside
- Turn down radios and television if too loud for patients
- Awareness of ringing phones and impact on patients
- Awareness of beeping machines and impact of patients
- Tell other staff to ‘Be Quiet’
- Using available quiet spaces if patients are distressed
- Consider the impact of too many visitors on a ward

Lighting

Physiological changes in the eye with ageing means that by about 75 years old, people need twice as much light as normal lighting standards recommend. Therefore lighting should be set by someone who is of mature years.

Note: Not just for Dementia - People over the age of 75 need double the amount of light due to the age eye.

Age 20 Age 60 Age 75

Pictures above: Demonstration of how aging changes the view/light transmission

Light is measured in Lux, using a Lux Metre – which was obtained from the maintenance team in the hospital for this project. The University of Stirling make specific recommendations on the level of lighting in areas for people with dementia – see appendix 3. Therefore, all areas on the ward that patient's had access to had the lux measurement identified and had compared to the specific recommendations for dementia.

Following this it was identified that certain areas required additional lights and this was highlighted to the maintenance team who introduced new lighting and different bulbs. They also took on board the recommendations for other areas of the hospital.

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Note - Lighting: What you can do now?

- Firstly ensure that all light fixtures are in use and bulbs are in working order.
- A good way of delivering light is by use of daylight – don't block the available daylight with unnecessary blinds, and curtains that do not open beyond the window.
- Educate and encourage staff to use existing bedside lights and over mirror lights for patients remembering and reiterating the point above that people over 75 need double the light.
- Using a lux meter you can measure the existing lighting and compare to the recommendations for dementia.

Pictures

There were some existing pictures on the walls of the ward but these were placed too high for the average patient and were re-located to a more appropriate height. These pictures were of Cork city in the past and were a good prompt for patient's to reminisce and encourage mobility.

Following consultation with the ward's physiotherapist it was identified that the pictures that were lined up in a row were a good indirect cue for patients to walk along further and over all promote mobility.

Additional pictures were chosen and obtained from The Examiner and The Evening Echo photo library. The pictures were chosen with the average age group of the patients considered as well as gender and city and county patients therefore a good mix of pictures to suit various patients were chosen.

In the patient's sitting room we also have a picture that is associated with the season e.g. daffodil for spring and snow for winter. This acts a orientate cue for patients to help orientate them to the time of year.

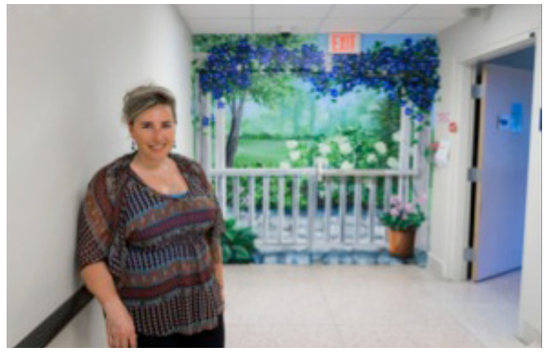
Concealment Techniques

Concealment techniques are design interventions that can consist of wall murals, painted book case (see below), various prints added to exit doors, a bus stop which all attempt to reduce exit attempts, reduce agitation, increased safety and satisfaction of patients in various environments.

There has been some research into these techniques & there have been positive results, including reducing the feeling of institutionalisation with settings for both patients and families.

While visiting one of the nursing home (Carrigoran House) it was seen firsthand the use of book shelf mural on a door leading to the laundry which patients tended to follow staff into prior to the mural being in situ. Staff reported that this reduced attempts by patients attempting to follow staff through these doors.

See below for some examples of concealment techniques.



Picture above: Door on ward that concealment will be introduced, however awaiting authorisation from Fire Officer to complete this.

Communal Spaces

The Sitting Room

The existing communal space was used a storage area. A space that is familiar and safe was created to help patients to relax and engage in familiar activities e.g. watching television and sitting around a fireplace. The room also has a table and chairs which will promote socialising and engaging in group activities.

What was completed

- The room was named 'The sitting Room' to take the institutional feel away.
- A fake fireplace unit was installed (Electric Fire Dimplex Chadwick Fire Suite CDW12WW). Several fires were reviewed and discussed with suppliers but this was deemed the most appropriate and safe for patients.
- The blinds in the sitting room were changed. Curtains and roller blinds were considered but unfortunately from an infection control/hygiene perspective these were not able to be used therefore we had to settle on the office style blinds.

- Wipeable wall paper was used as a feature wall where the fireplace was located. This met hygiene standards. This was followed through on the door of the dayroom to provide a cue that ran through to help orientate patients. The wallpaper was supplied by DAOL office supplies that provided two online catalogues from which to choose from.

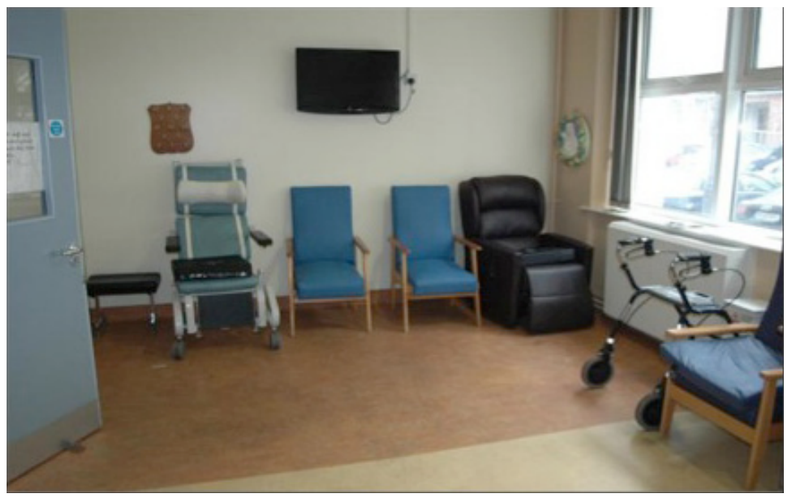
- Pictures were placed on the walls of the sitting room – again a mix of age/gender etc were considered when choosing these.

- Furniture including a sofa, table and chair, television unit and shelving unit were obtained from a local furniture shop (New Furniture Centre, Blackpool) and these were picked in conjunction with the infection control and hygiene teams to ensure that standards were met.

- Local businesses donated a radio and record player.

- New chairs were ordered that provided a good contrast for patients to identify them and at various heights to accommodate different patients.

- Sensory boxes with various items were placed in the shelving unit along with brass items donated from a local shop. Polishing brass has been highlighted as a therapeutic activity for patients with dementia.



Before – “Dayroom”

After -“Sitting Room”

Outdoor space

There is abundance of evidence to suggest that exposure to natural daylight has a variety of benefits including;

- Help maintain a good circadian rhythm
- Reduces Seasonal Affective Disorder (SAD).
- Trigger the production of Vitamin D in the body which increases bone strength and can resulting in fewer falls and reduced severity when they occur
- Reduced stress & reduced behaviours that challenge
- Fresh air and sunlight, which kill bacteria
- Therapeutic views, which aid people’s recover from ill health
- Provides opportunities for activities, socialising and exercise

At MUH being an inner city hospital space is a premium although there was available space at the rear of the ward, this was not accessible to patients due to air vents releasing fumes at the left of this area which was identified as a risk to patients. There was no alternative outdoor space available in the hospital grounds.

What was Achieved

- The space outside St. Mary's Ward that was on view from the patient areas was reviewed – see picture below
- Two murals were already put in place the previous year to ensure that patients had something colourful to look out at.
- Flowers were placed on the railings to brighter the area/enhance the view.
- Creepers were planted by volunteers to ensure that a grey dull wall.
- The other external area was a street view – Cork City Council were contacted and they visited & identified that the suggestion of raised beds was not possible due to space but they would ensure that hanging baskets were placed to improve the view for patients looking out at the street level.

Things to consider: Look at the view from where patients are sitting not just inside but the outside areas. Some of the solutions are very inexpensive to ensure.

Conclusion:

Benefits of Having a Dedicated Person

There were many benefits of having a designated person with designated hours responsible for environmental changes which include;

- Protected time –research evidence/ best practice guidelines/ looking internationally at work already completed.
- Ability to visit different units and see practically what works and what doesn't worked and why.
- Have available time to put a plan in place with various stakeholders and ability to drive this plan forward.
- Involve patients where possible in the process – this is obvious a difficult area for the patients to be involved due to the nature of their diagnosis but the time was available to involve in some of the decisions.

- Link person between clinical staff and development team – able to understand the works of the wards/patient's function in the environmental and explain firsthand the need for changes and reasoning.

A huge part of this project has been the mutual learning between various departments. For clinical staff it has been very insightful into what goes on behind the scenes of an acute hospital in terms of cost of environmental change, timescales, processes and adhering to safety standards etc.

For the Development Team, as mentioned, above having a link person with the wards to explain how things work on a daily basis and how patients may function and behave in a hospital setting.

The overall positive response from all staff that were involved at MUH made the changes happen and will lead to sustaining these concepts in the future.

Sustainability:

- Ensuring a dedicated person in the Estate and Development team – ensuring that person understands the concepts of design for dementia and the reasoning behind the decisions made.
- Ensuring the person who is responsible and/or led the environmental changes has scope to provide advice to other departments within the organisations following project completion.
- Presenting to and sharing the learning/evidence base and reasoning for the decisions with senior management will enable these staff to better understand the decision-making, which can be passed down to all staff.
- Teaching to staff – in conjunction with the above point this educates and empowers staff to use the environmental changes e.g. theming the rooms with flowers – engaging staff in using these cues to orientate patients, engaging staff in prompting patients to look at the clocks/pictures behind their besides for orientation purposes.

If you require any further information please contact

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Appendix 1 – References/Further useful information

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Appendix 2 – Some of Pictures used behind bedsides

Appendix 3 – Lighting Recommendations for Dementia (Stirling University)

dsdc Dementia Services Development Centre

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Recommended light levels

(sample page from the DSDC lighting book)

Area	Maintained average horizontal illuminance (in lux) not less than		Minimum overall *colour rendering index* (R_a)	Minimum lamp *colour rendering index* (R_a)
Living rooms	300		85	80
Ensure high lighting levels at activity tables and seats for reading by positioning lights nearby				
Recreation	300 supplemented by 300		85	80
Provide 300 lux from artificial lighting. Supplement by 300 lux daylight when available and 300 lux from free-standing units when daylight is not available				
Kitchens	600		85	80
Ensure high lighting levels at worktops, sinks and server counters by positioning lights nearby				
Bathrooms and toilets	300		85	80
Ensure high lighting levels at wash-hand basins and WCs by positioning lights nearby				
Bedrooms	200		85	80
Ensure high lighting levels at headboards and dressing tables by positioning lights nearby				
Dining rooms	300		85	80
Ensure high lighting levels at dining tables by positioning lights directly above them				
Other areas				
Corridors – at night	No activity	20-50	85	80
	Activity	100-150		
Corridors - daytime	No activity	50	85	80
	Activity	[1] 150		
Corridors – mid point of relevant doors[1]	200 (vertical)		85	80
Offices	500		[1] A relevant door is one that is meant to be identified and operated by people with dementia	
Lifts	175			