

European Health Property Network Copenhagen Workshop 22-24 October 2012

Speakers and Abstracts

John Senan Cole B.Sc. (Arch), D.A.A.S., M.Sc. (Proj.Man.), RIBA, FIHEEM, PPRSUA



John Cole, an architect by profession, is Deputy Secretary/Chief Estates Officer, of Health Estates Investment Group (HEIG), in the Department of Health, Social Services and Public Safety in Northern Ireland and sits as a member of the Departmental Management Board. Health Estates Investment Group is responsible for the development and implementation of Departmental policy relating to the Estate and for the planning, project management and procurement of all major health projects in Northern Ireland. In relation to this role he has developed 'best practice' procurement routes for both publicly and privately funded projects. He has a particular interest in seeking to improve the design quality of public sector projects.

He is currently Chairman of the European Health Property Network which supports shared learning and information on strategic health estate planning between the European countries. He has lectured widely internationally and has contributed to many publications in this area.

He was President of the Royal Society of Ulster Architects from 1996-1998 and has served 12 years as a member of the Council of the Royal Institute of British Architects. He has previously held the positions of Chairman of Continuing Professional Development and Chairman of the Procurement Committee at the RIBA.

He has served as a visiting lecturer at Reading University for the MSc Course in Project Management and as an external examiner for the Department of Architecture at Queen's University, Belfast.

He was founding chairman of the Construction Industry Group for Northern Ireland and the College of Professional Bodies associated with the Construction Industry.

Jonathan Erskine (MA Cantab) has an academic background in Philosophy and Art History, but worked for a number of years as a technical writer and journalist, and later as an IT manager. Following studies in Natural Sciences with the Open University, Jonathan joined the School for Medicine, Pharmacy and Health at Durham University, UK, first in the Centre for Clinical Management Development, and later joining the Centre for Public Policy and Health as Research Associate in 2008. His research interests are in the areas of health service reform, the boundaries between primary and secondary care, and the relationship between the design of health service systems and the built



healthcare environment. He has published on a wide range of topics, including models of long term care, capital investment in healthcare infrastructure, systematisation of clinical care, and guidelines and standards for healthcare buildings. He is currently involved in a major research project that focuses on the implementation of a region-wide programme of quality improvement in the English NHS.

Jonathan has had a long association with the European Health Property Network (www.euhpn.eu) where he is Executive Director. He was non-executive director and Vice Chair of NHS Stockton Primary Care Trust from 2007 to 2011.

Steve Wright, Executive Director, European Centre for Health Assets and Architecture



Steve spent a substantial time in consultancy and industry working on energy issues and then joined the European Investment Bank. He was an Associate Director at the Bank, and in recent years established and for ten years ran the health (and education) sector and project techno-economic appraisal functions. During this time, the lending programme went from a standing start to being a permanent and major activity throughout the majority of the 80 or so countries where the Bank operates.

He was involved as a Steering Committee member of the European Observatory on Health Systems and Policies for many years. Latterly, this also involved being an editor and chapter author on two analytical books published in 2009 and 2010 - *Investing in Hospitals of the Future* and *Capital Investment for Health* (both available for free download from the Observatory website). He was also a Board Member and Treasurer of the European Union Health Property Network.

He has established and runs the European Centre for Health Assets and Architecture, a research centre, network, and strategic advisory group looking at the interface between the fixed facilities, in the widest sense, and the delivery of healthcare services. Partners of ECHAA include TNO (Dutch state research organisation), HaCIRIC (a group of English universities looking at healthcare infrastructure), Semmelweis University Health Services Management Training Centre and Aalto University. There are other potential state and institutional members.

A follow-up book between ECHAA and the Observatory is being considered, to develop understanding of the boundaries between hospitals and other parts of the healthcare system, with a perspective of their operation in terms of simplified processes. ECHAA also addresses problems of transition economies and health; quality and safety of the built environment; sustainability and life-cycle; and finance issues including payment systems and PPP. The group is currently assisting the Hungarian administration with respect to health aspects at the level of EU Council.

Steve has published a number of academic and other articles, and regularly speaks at international conferences on healthcare, finance and hospital issues. He is an Honorary Research Fellow at the London School of Hygiene and Tropical Medicine, and teaches at Management Center Innsbruck.

Abstract: Macroeconomics & Strategic Asset Planning: What is the reality for future capital resources, and who can we get to pay for them?

The talk is intended as an appetiser to subsequent presentations, dealing with some of the themes for the 2012 Workshop – primarily on the key (economic) pressures on healthcare systems and the meaning of financial austerity, but touching as well on the role of the private sector.

The essential point is that the current economic circumstances faced by all European countries are not “normal”; Western nations have had recessions since capitalism began, but the depth and more important the length of the “Great Recession” are unprecedented since the Great Depression of the 1930s. In that context, talking about the impact of austerity on health systems has little value without an understanding of where the recession came from and where it is going: engaging with macroeconomic understanding, and ministries of finance, has never been more important for health and healthcare systems. Worryingly, there is little consensus in the macroeconomics profession about the crisis! The presentation will discuss the role of unsustainable public and private debt levels, in order to show that state funding of public healthcare systems, including for new capital investment, will be stressed for many years to come. Our ageing societies simply add to that problem.

If the state cannot fund, what are the alternative sources for investment? The availability of new capital sources will vary across countries, but all need to be reflecting on the issues. The presentation will review the options, noting that the obvious source - Public-Private Partnerships – needs a make-over both in terms of innovation in the scope of the contracts and in the financing routes.

Finally, some existing responses by health systems to the economic crisis will be noted, with a question mark about their plausibility as enduring responses to an enduring problem.

Barrie Dowdeswell, Director of Research, ECHAA



Barrie Dowdeswell has an economics background (Bristol University) and spent his early years with a major multi-national corporation prior to a 30 year career in the UK NHS. For 20 years he was a Chief Officer in the service, primarily at Hospital and Regional levels. He was for a large part of that time the Chief Executive of the Royal Victoria Infirmary NHS Trust in Newcastle upon Tyne, one of the largest hospital groups in the country. Throughout his time in the NHS Barrie has been responsible for a number of landmark new hospital developments and has also been a member of a number of national NHS policy advisory boards including at times: National Research Committees, University Funding Council (Health), Non-Executive

Director of the National Blood Service and of the former Public Health Laboratory Service. He was also for some time a member of the Ministerial advisory group reporting directly to the Minister of Health.

He left the NHS in the late nineties to pursue wider interests in global health policy development as a Research Fellow at the University of New South Wales, Sydney a post he has retained following a move back to Europe

He was also formerly Executive Director of the European Health Property Network - a pan-European independent foundation - established to enable those working in strategic asset planning, design and procurement and at the top level of government, to collaborate in raising the standards of hospitals and health facilities throughout Europe.

In 2008 he took on the post of Director of Research for the European Centre for Health Assets and Architecture (ECHAA) in order to devote more time to developing stronger and more collaborative Europe wide research in this field.

He has also directed a substantial portfolio of research studies. Reports and studies include: a 'Comparative Study of Public Private Partnerships (including PFI) in Europe and Australia' and a European 'Survey of the Interface between Service and Strategic Asset Planning' and Principles of Lifecycle Investment Appraisal. Barrie's personal research interests include public private partnerships and concept development strategies for healthcare capital investment. He was co-author and co-editor of the recent publications: "Investing in Hospitals of the Future" and "Capital Investment for Health, Case Studies for Europe", as part of the European Observatory study series. He is currently directing a review of the effectiveness of European Structural Fund process for healthcare, with particular regard to health infrastructure investment, as part of a 3 year EU Commission project.

Professor James Barlow, Imperial College Business School, UK

James Barlow holds a Chair in Technology and Innovation Management at Imperial College Business School. He leads a programme of research on the relationship between innovation in healthcare technologies, services and infrastructure. James has many years' experience advising government and industry on healthcare technology issues, both in the UK and overseas. Much of this work has been on the development and introduction of remote care, and he has worked both with companies and NHS / social services and with government at a strategic policy level. He is part of the team evaluating the Whole System Demonstrators programme.



Abstract: *The mainstream introduction of 'remote care' - also known as telehealth or telecare – is gathering pace. In the UK the world's largest randomised controlled trial of this technology has just been completed and the government has ambitions to introduce it to 3 million people over the next 5 years. Although the evidence base for its benefits in relation to clinical and quality of life indicators and its economics remains mixed, remote care will form an important part of emerging healthcare models in the 21st century. Its impact on flows of patients through the care system and on demand for beds in hospitals and nursing homes will have important implications for future healthcare infrastructure. The presentation will explore what these might be.*



Marlene Willemann Würgler, Danish Regions

Marlene is a Senior adviser at Danish Regions, an organisation which takes care of the interests of the regions in Denmark. Education: Sociologist, been working with the Danish health care system for 11 years, 7 years as a researcher and 4 years as officer/civil servant. She is the project manager of a project on sharing knowledge between the 5 regions and the 16 big hospital construction projects in Denmark.

***Abstract:** The presentation is about the Danish programme for investing in a new modern hospital structure. It will outline the visions and framework for the 16 new big hospital construction projects which are in progress the next 10 years. The presentation will also focus on the challenges that exist in a publicly funded programme for hospital construction.*

Claes Brylle Hallqvist has been Executive Vice President at Bispebjerg and Frederiksberg Hospitals since April 2010. He is a member of the board of directors for the two hospitals. He has the main responsibility for the construction of 'New Hospital and New Psychiatry Bispebjerg' - a highly complex 530 million Euro construction project due to be finished in 2025.

Claes Brylle Hallqvist has previously been Manager of Strategic Property Development at Deloitte Denmark, and prior to this he has worked on the development and construction of large scale building projects for Copenhagen Airports and Royal Palaces and Properties Agency. He has a degree in engineering and law.



Abstract: New Hospital and New Psychiatry Bispebjerg – building a modern urban hospital on a historical site

'New Hospital and New Psychiatry Bispebjerg' will be established on 'Bispebjerg Bakke' - the site of the existing historic Bispebjerg Hospital. A part of the hospital has been listed for preservation and must undergo minor renovations and modernization. Some buildings need to be renovated completely, others will be demolished, and approximately 120,000 square metres of new buildings will be built. All of this will happen, without interrupting the operation of the existing hospital. The new hospital will be the home of the merged Bispebjerg and Frederiksberg Hospitals and a new psychiatric hospital. This modern urban hospital will provide more than 416,000 citizens with world-class treatment of both body and mind.



John Stefansen

MSc in Human Geography
 Head of office, Project Department, New Aalborg University Hospital

Main competencies:

- Strategic planning
- Physical functionality and flows
- Workflows
- Dimensioning
- User processes

Abstract: A presentation of the New Aalborg University Hospital

The North Denmark Region is in the process of planning the building of a new Aalborg University Hospital. The project is part of the [Danish government's quality reform](#) in the health care system, and a total of DKK 4.1 billion has been allocated for the project.

The region held a [design competition](#) in 2011 through 2012 to show the possibilities of building a new hospital complex in an area in the eastern part of Aalborg and a general structural plan for the area. The winning project was chosen in June 2012.

The presentation will largely focus on the framework and conditions for the new hospital and the hospital's functional structure.

Frank Jensen, Dipl.Ing. Ph.D. is project manager for the Medic OUH Consortium. He is responsible for process coordination and interfaces across project phases and internal and external stakeholders as well as overall logistic and engineering design. He is third generation and co-owner in the engineering consultancy Søren Jensen Consulting Engineers based in Aarhus, Denmark.



He has through the last 8 years been lead engineer and structural designer for range of award winning smaller and larger projects within healthcare and architectural engineering. He has previously been deputy lead-engineer on the New University Hospital in Aarhus, Denmark.

Abstract: New University Hospital in Odense – Design and innovation of a visionary healthcare facility

Currently under design the New University Hospital in Odense plans to offer patients and staff a facility that will be at the forefront of global healthcare design. To meet the high expectations of the client and the future users the interdisciplinary Medic OUH Consortium has taken a radically new approaches to both overall design intend and the individual solutions for logistic and engineering design.

The master plan and the architectural design are derived from the desire to provide a healthcare facility in harmony with the human scale, the surrounding landscape and a

robustness towards the many, often changing, requirements it will be exposed to throughout its design and subsequent life.

To enable efficient workflows for the clinical staff a complete decentralization and automation of storage space has been adapted for the hospital logistics. Thus approximately 70 compact, vertical storage robots provide the hospital with its storage total capacity while also providing the staff with near-at-hand goods retrieval and waste disposal.

A decentralization strategy has also been adopted for the building services. The strategy provides the facility with an increased readiness for future upgrades and adaptations as it simplifies the building services infrastructure. It also allows a much more efficient use of space as it permits the designers to design with volume rather than area efficiency thereby greatly reducing the area needs for the technical plants and hence construction costs.

Dr. Michael Phiri, Director of Healthcare Environments, The University of Sheffield, School of Architecture has a track record of co-ordinating and directing over 30 research studies into the human aspects of healthcare environments. This has involved undertaking 3 main activities 1) Conducting original empirical investigations (Lawson & Phiri 2000, 2003, 2005); 2) Collating, reviewing, structuring knowledge (Phiri 2006) and compiling electronic databases, for example Sheffield Healthcare Environment Database currently being developed at <http://hear.group.shef.ac.uk/> as a facility planning, design and management resource¹; and 3) Producing design tools (ASPECT/AEDET Evolution/IDEAs²) to aid the design process (Lawson 2007). The Department of Health now routinely makes use of these tools - ASPECT/ AEDET Evolution/IDEAs - during briefing, design/build and operation of healthcare facilities under any procurement system. Dr. Phiri has received over 17 research grants from, Health & Care Infrastructure Research & Innovation Centre (HaCIRIC) (EPSRC-Funded collaboration of Imperial College, Loughborough, Reading and Salford Universities), Department of Health, NHS Estates, Health Facilities Scotland, Guy's & St Thomas NHS Trust, South Tees NHS Trust, Macmillan Cancer Support, Rotunda and Sligo General Hospitals, Ireland, Clinicenta and others. He is author of 8 books and over 40 technical reports.



Abstract

This Brief's content is in two main sections. The first section identifies and reviews approaches and strategies advocated for the design of the healthcare built environment, in order to provide the rationale and a suitable basis for implementing design for sustainability, coupled with evidence-based design. The section also considers healthcare premises planning information, technical guidance and tools in healthcare, the main instrument used to aid the delivery of hospitals and other healthcare facilities. A summative rather than a comprehensive review of the Healthcare Planning Information, Healthcare Facility Briefing Systems and tools provides an appropriate basis to examine some of the emerging issues. The review also answers the question of need for technical guidance and tools in healthcare, over and above the Building Regulations or norms applied to other building types. Healthcare Planning Information that includes Briefing Systems is needed because of the nature, uniqueness and complexity of healthcare to aid the identification and recording of

¹ 'Healthcare Environment Architectural Resource' (acronym HEAR)

² ASPECT (A Staff/Patient Environment Calibration Tool kit), AEDET (Achieving Excellent in Design Evaluation Tool kit), IDEAs (Inspiring Design Excellence & Achievements)

user requirements and formulation of the Client Brief, the design, construction and management of the completed healthcare facility.

The second section identifies and showcases carefully selected exemplary case studies, first in the UK, EU and USA and second in China and Australasia of applying design for sustainability, coupled with evidence-based design principles and corresponding design interventions. The aim is to elicit lessons learnt and to document the key drivers for these case study projects and the consequences of implementing these design approaches and strategies. For example, the First People’s Hospital of Shunde, Foshan District, China project, is designated as a pilot sustainable hospital, allowing exploration of sustainable technologies for future hospitals. In this case, the design goal and challenge is to translate advanced Western healthcare ideas to accommodate Chinese local practices, creating an innovative healing environment. The case study highlights some of the difficulties of wholesale importing of guidance and tools based upon policies, regulations and supporting infrastructure of the countries of origin. The need is for customisation of the guidance and tools, not only to recognise local practice and geography but also to acknowledge the limitations of the operating framework.

The two sections of the Brief provide an appropriate platform for discussing emerging issues and worldwide challenges facing all the organisations which provide, commission and regulate the delivery of healthcare and/or the accommodation in which health and social care is provided. The Brief concludes by accepting that implementing design for sustainability, coupled or integrated with evidence-based design, is developing as an emerging science, rather than evidence-based design on its own.



Laszlo Helmle, Director of regional health management centre of the National Institute for Quality and Organizational Development in Healthcare and Medicines, Hungary.

Laszlo Helmle graduated as a physician at the Semmelweis University in Budapest and later specialized in clinical pharmacology. He received his master’s degree in Biomedical Engineering from the Technical University of Budapest. He studied pharmaceutical policy and pharmacoeconomics at Eotvos Lorand University in Budapest and is currently pursuing his master’s degree in health management at the Semmelweis University in Budapest. He spent more than 16 years in the pharmaceutical industry with increasing responsibility in the field of clinical research, regulatory affairs, pharmacovigilance, and medical affairs. Most recently he accepted an appointment in the newly established Hungarian regional health management system and is now the director of one of the eight geographical regions encompassing 16 state owned hospitals and national institutes.

Abstract: What is being restructured in rebuilding the Hungarian health care? Is it concrete?

Key concepts of the on-going health care reform in Hungary are laid down in the Semmelweis Plan subtitled as Resuscitated Health Care - Recovering Hungary. Some major mile stones have been achieved amongst which are the establishment of the regional health management system and the standardization of progressivity levels by medical fields. Meeting the revised minimum criteria of various professions imposed on the service providers does have an impact on the infrastructure and human resource, instrumental aspects of the health institutions. A great deal of building new infrastructure and refurbishment of existing buildings has been started prior to initiation of the on-going health care reform. Plans for future establishments, application for EU funds are now coordinated on a national and regional level to better harmonize with the role assigned to the actual health institution.



Efthimia Pantartzis, Research Associate, Loughborough University, HaCIRIC, United Kingdom

A healthcare architect and consultant, she is a Research Associate at Loughborough University, at the Health and Care Infrastructure Research and Innovation Centre (HaCIRIC). She is currently working on the EPSRC (European Physical Sciences Research Council) funded project 'Optimising Healthcare Infrastructure Value through Enterprise and Knowledge Transfer'. She has successfully completed a MSc in Planning Buildings for Health at MARU-South

Bank University, with a dissertation on how to develop an appraisal system to measure efficiency in masterplanning of healthcare facilities. She has studied Architecture at the Polytechnic University of Bari and she graduated with a thesis on urban development as an aggregation of patios from residential housing to specialised building complexes. She has been working in the public sector on healthcare projects in the last five years in Italy, mostly on acute and specialised hospital project refurbishments and reorganisation of services at regional and local scale. She has worked at the European Topic Centre on Spatial Information and Analysis (ETC-TE LUSI) in Barcelona, with a Leonardo da Vinci scholarship, in support to the European Commission and European Environment Agency (EEA) member states in their attempts to achieve sustainable development and to improve their environment. She is a coordinator for safety and health matters at the project preparations and execution phases (D.Lgs. 81/2008). She has experience in private housing, retail and sport projects in Italy. She has participated to architectural project competitions and to international urban research workshops. She is registered at the National Board of Architects OAPPC of Bari and she is a SIAIS member.

Grant R. Mills, Loughborough University, UK



A senior researcher at Loughborough University since July 2002 investigating value and estates and facilities reconfiguration within a number of healthcare organisations. He has since 2007 been working as part of a unique and internationally leading collaborative centre – Health and Care Infrastructure Research and Innovation Centre (HaCIRIC). He has a growing healthcare research portfolio as co-investigator on 8 collaborative UK healthcare research projects valued at just under £2,000,000. These investigate: healthcare evidence based design, health scenario planning, integrated strategic asset management and master planning, health gain and sustainable infrastructure planning in healthcare. Areas of specialisation are healthcare value, lean process and quality management, advanced organisational and project stakeholder consultation, market planning, business management, operational research, strategic asset management and decision support, economic evaluation, service reconfiguration, healthcare service modeling and simulation, capacity planning, sustainable care pathway design, accessibility analysis and health gain/impact assessment.

Abstract:

This presentation describes the outcomes of a Loughborough University and EPSRC funded research project on the development and deployment of previous research findings.

The aim of this presentation is to describe the proof-of-concept development of a new decision making tool, that demonstrates ways of optimising healthcare infrastructure value and in reducing clinical obsolescence through scales and across settings over a buildings

service life. Different tools, some existing and some under development, can lead to a balanced and accurate decision making process at early design stages and during the infrastructure lifetime, so that decision makers and infrastructure planners can appraise a variety of options and put in place the most valuable.

Data Envelopment Analysis, Social-Return-On-Investment, Refurbishment Option Matrix and Discrete Event Simulation are all techniques that can be used independently or in combination to calculate where a healthcare infrastructure stands and opportunities to improve its efficiency and effectiveness throughout the present and the future.

Mike Baxter, BA(Hons), CPFA
Deputy Director
Capital and Facilities

Mike is the Deputy Director (Capital and Facilities) within the Scottish Government Health Directorates. Mike's role covers asset management, the distribution and monitoring of the capital budget for NHSScotland as well as the development of capital investment policy within the Scottish Health sector. Mike is an accountant by background and spent 11 years in local government before joining the then Scottish Executive in January 2000. Mike was Head of the Private Finance and Capital Unit between 2002 and 2008 before taking up his current role. Mike is Chair of the Health Directorate's Capital Investment Group and a member of CIPFA's Executive Committee in Scotland. Current responsibilities include the implementation of the asset management policy, asset performance framework, long term capital planning arrangements for NHSScotland, the continued development of the hub initiative and taking forward a response the Sustainable Development Strategy for NHSScotland.



Simona Ganassi Agger, Architect and Urban Planner



Simona received her doctorate in Architecture at the University of Venice, taught for several years first at the University in Venice and then in US Universities, and lectured in several universities in Europe and in Canada. She conducted studies about the Venetian urban situation and problems for Unesco, and for the Italian Research Ministry. She worked as an expert for the Italian Senate in the preparation of the first "special law" for Venice.

Her major book "Urban self management – Planning for a new society" published by M.E. Sharpe in White Plains, NW – USA, originally published in Italian, has been translated also into Arabic. From 1998 to 2005 she has worked as a consultant with the Company Europrogetti & Finanza, specialized in the promotion and evaluation of development projects for the Regions of the South of Italy co-financed by the European Commission and the Italian Government.

She has been appointed, starting in 2002, as one of the expert for the Ministry of Health of the Evaluation of Health Investments Team for the evaluation of investments' programs of the 20 Italian Regions and of the major new hospitals financed with National Government funds.

For the Ministry of Health she has participated in several European projects involving many EU Countries and also new members such as Bulgaria and Slovakia. She has been project manager of an European project of the program “Community Action in the Field of Health” under the DG SANCO and at the present time she is project manager of “RES-Hospitals-towards zero carbon hospitals with Renewable Energy Systems”, which involves partners from eight EU Countries.

Simona has an extensive international working experience having worked as an Architect and Planner in Algeria, Gabon, and Senegal. In the US she has been involved in research for the renewable energy with the Oakridge National Laboratory and at the present time she develops projects of energy saving and use of renewable sources for hospitals and health facilities. She represents SIAIS, the Italian Society of Architecture and Engineering for Health, on the Board of the European Health Property Network. Email: simona.agger@gmail.com.



Cédric Tcheng is an engineer who worked in aeronautics, space and nuclear physics products development for EADS group during 5 years. Then he changed with a Master degree specialized in management of health structures. He was director of a network linking hospitals and town structures for aged people and then director of a network for cure and care at home. Today and for the last 5 years he is director of Saint Mary Rehab Hospital in Villepinte. He’s also teaching management of health structures

Abstract:

Infrastructures are the basic tools for cure and care. Cure and care depends on patients and professional teams. This should be the departure of a strategic planning for infrastructures. The path back to the planning is complex because patients are changing and the professional environment too (job, equipment), but majority of existing walls will remain.... The bottom-up approach would like to help in infrastructures planning with giving examples of what is observed today inside the walls of hospitals in France and what is expected for tomorrow in France. A point of view ‘from the base’.

Giuseppe Lacanna, ing. arch., born in Maratea (Italy) on January 25th, 1983.

Giuseppe is a licensed architect in Switzerland and Italy. Currently he is a PhD researcher at the TU Delft, Department of Architecture, and he practices as an architect and researcher for the biggest healthcare architectural firm in the Netherlands: EGM architecten b.v. His interests span from the architectural design of healthcare buildings to the interactions between the built space, the users and the urban context with particular emphasis on the public spaces.



How the public spaces in large hospitals can be transformed strategically in propellers for renewal and new economies is his specialization and his main field of investigation. He constantly follows the activities of the Academy of Architecture for Health of the AIA.

Giuseppe studied at the Faculty of Architecture of Florence in Italy, ČVUT and TUL Liberec in Czech Republic. From 2012 he sits in the cultural commission of the Order of Architects P.P.C. of Matera as the youngest architect with the longest international experience so far.

Abstract:

Hospitals are special kind of buildings. They have always played an important role into the society due to their public character. Sometimes they are life-threatening, sometimes they only affect the quality of life of their visitors, but still they are perceived as "different". The function and the guise not always have been parts of the same medal for these establishments. Architecture started to make a rational use of its power on the healthcare buildings only in the last quarter of the eighteenth century. At this time the traditional way of designing, relating the buildings to the four classical models - churches, palaces, town halls and merchant's houses - was dropped. The way of conceiving the hospitals changed as well, going from an hybrid form in-between a church and a guest house towards a bullwark of medical science.

The more exactly a building was tailored on its function, the better it would have been. Following this line, the hospitals became segregated high-tech complexes, isolated from the city context, where treatment and care were provided. Quite often the feeling of alienation in these kind of spaces still reigns supreme. Moreover, nowadays they are even not more sustainable in terms of expenditure for the governments or other institutions such as insurance companies.

So, how to cope with that? Could we believe that such buildings can be planned and designed in a more strategic way in order to become even propellers for new economies? Can Architecture play a role in reducing the costs of the overall management of the system hospital? Can hospitals really be designed around the patients rather than only around science?

These are some of the questions that after decades of neglect Architecture is called back to answer. This lecture is intended to go through the trends ongoing in the Netherlands in the hospital's design scenario to see how Dutch Architecture is reacting to these issues. Trends that often respond to strategies for improvement rather than being simply concepts. Particular importance will be given to two important practical examples: the Jeroen Bosch Hospital in 's-Hertogenbosch and the Vlietland Hospital in Schiedam.

Ia Belfrage, White Arkitekter and **Emma Kinch**, Acting Director, Property Planning Unit, Locum AB

Emma Kinch:

Master of Architecture from Lund Institute of Technology/ Lund University, Sweden 1997
 Architect at Sweco Architects, Stockholm 1998-1999
 Architect at Strategisk Arkitektur, Stockholm 2000-2009
 Joining Locum in January 2010 as Property Planner
 Acting Director of the Property Planning Unit, Locum, since January 2012



Emma Kinch

Abstract:

This presentation will begin with an overview of strategic planning for University Hospitals in Sweden, followed by a briefing on the Stockholm way of future planning of hospital sites. The presentation will include a case study on the Property Development Plan for the Huddinge site, where part of the Karolinska University Hospital is situated, and how this development ended up making use of principles and guidelines rather than a fixed plan.

Andrew Smith is Chairman of the Northern Region of BDP and Head of Healthcare Design. He is a Board Director and chairman of the Sheffield studio.



Over the last 20 years, Andrew has worked on large scale, complex projects in many sectors, encompassing a range of urban design, accessibility, landscape and historic building issues.

Andrew is responsible for all healthcare projects undertaken by the practice, he led the design teams for Queen Elizabeth Hospital, Birmingham and Southmead Hospital in Bristol, as well as the recent successful bid for Bispebjerg in Denmark. He was a member of the NHS Design Review Panel and the expert reference group for the Design Council's 'Design for Patient Dignity' programme. He is also a visiting lecturer at the University of Sheffield and Sheffield Hallam University.

Abstract: Bispebjerg Hospital Masterplan

Bispebjerg Hospital is located on the northern edge of Copenhagen City Centre in a beautiful, historic, landscape setting. The hospital's buildings were designed between 1908 and 1913 by Martin Nyrop, the celebrated Architect of Copenhagen City Hall. The landscape was designed by Edvard Glæsel. The pavillion buildings and landscape are both listed.

The challenge facing the hospital is the need to consolidate the activities of two hospitals (Bispebjerg and Frederiksberg) into new, somatic (acute) and psychiatric facilities, whilst also enhancing the existing setting.

In the summer of 2012 BDP won an international design competition to design the masterplan for the new facilities.

BDP's masterplan seeks to create a series of quarters, each with its own character, which together create a cohesive identity for the campus as a whole. These quarters comprise the main clinical functions – somatic, psychiatric and ambulatory, focused around a central park. This park forms the main arrival space for patients and creates sufficient space between new and old buildings to allow both to co-exist harmoniously.

The masterplan also seeks to open up the hospital to the surrounding community, providing enhanced pedestrian and cycle linkages through the hospital campus and creating attractive landscape spaces for quiet or active enjoyment.



Claudia Bloom, Director, Avanti Architects

Claudia's involvement with healthcare design commenced with a hospital client who had dispensed with all traditional briefing tools. Since then she has found healthcare design to be one of the greatest intellectual and design challenges of the world of architecture: the resolution of high levels of complexity with inadequate budgets also providing endless opportunities for 'innovation'. Claudia's healthcare experience covers primary, secondary and tertiary care and all forms of procurement specialising in PFI delivery from both the consortium and the Trust sides and most recently P21 NHS supply chain as well as all as the more traditional procurement routes. Claudia is on the executive committee of Architects for Health and was involved in 'Building a 2020 Vision: Future Healthcare Environments'. Claudia enjoys organising visits and trips to new buildings in the UK and abroad and these have included Norway, Denmark, France, Germany, Switzerland, USA, China, Japan, Brazil (where Avanti have now opened an office). Claudia has worked at Avanti Architects since 1994 and was appointed a director in 2002.

Duncan Finch, Associate, Avanti Architects

Duncan has been working on the design of healthcare buildings at Avanti Architects for over fifteen years. He was drawn to healthcare design through a desire to contribute to the creation of buildings that make a positive social contribution, and because he enjoys engaging with the huge range of project sizes, clinical needs and logistical challenges that are available in the sector. Duncan's healthcare experience ranges from devising redevelopment strategies for NHS Trusts, to the design of children's hospitals, special needs accommodation and mental healthcare facilities. He has worked extensively at the front end of projects, using spacial awareness to create bespoke design solutions that reconcile potentially contradictory functional, logistical and urban design / aesthetic aspirations.



Abstract:

Taking an imaginative approach to the constraints imposed by complex hospital sites can result in great healthcare design that is more than the sum of its parts: that provides therapeutic environments and with limited means addresses ingrained problems with the hospital estate, while at the same time creating public buildings of lasting value. Achieving this unified resolution to the design requires an approach that constantly balances the functional and the aesthetic from the very start of design development: it is neither designed from the outside in or the inside out – by reconciling the pressures from each it is possible to create healthcare architecture that is about substance rather than image, and that can change to support the ever evolving world of healthcare delivery.



Marte Lauvsnes, research manager at SINTEF Health Research group for hospital planning. The SINTEF Group is the largest independent research institution in Scandinavia and SINTEF Health Research works with multidisciplinary approach to healthcare delivery, economics and quality.

Marte Lauvsnes was born in 1957 and educated as intensive care nurse with continuing education in management, economics, pedagogic and research methods. After 18 years as nurse working in neonatal and adult intensive care and as head nurse in a rheumatology unit (Europe's first

Planetree unit), she started out as hospital planner in the project organisation (RIT 2000) for a new university hospital in Trondheim, St Olav's Hospital. After 5 years of programming and planning, and the last years as chief of programming in RIT 2000, she continued as hospital planner both in a small firm, Medivi and from 2004 in SINTEF.

For the 15 years of experience with hospital planning Marte has for the most been working with projects for the hospital regions and health directorate in both strategic and detailed planning. The tasks has mostly been within activity analysis and forecasting, programming, area planning and evaluation of physical solutions in the context of patient experiences, safety, staffing, flexibility and medical innovation. She has also been working with development of methodology and tools for hospital planning. She has in addition to Norwegian project also been working with planning projects in Denmark, Latvia and India, and has a broad network with hospital planners internationally.

Susan Francis B.A., A.A. Dip., MARCA



Susan is currently Programme Director for Architects for Health, an RIBA Linked Society and membership organization for design professionals in the UK. Susan also works with EuHPN to develop the Fact File Project to share the best and most innovative examples of health buildings across the world.

At CABE (Commission for Architecture and the Built Environment) Susan was the Special Advisor for Health and worked closely with the Department of Health on Built Environment policy development. Responsibilities included leading the NHS Design Review Programme, directing research and policy development on community hospitals and sustainable design, devising and developing the Future Health Initiative across CABE that demonstrates how design can help to deliver sustainable places for health and wellbeing.

At the NHS Confederation Susan was architectural advisor to the Future Healthcare Network, a multi-disciplinary team that facilitated a learning network for over 80 NHS Trusts engaged in major capital developments for hospital, primary care and mental health services.

Qualified as an architect, Susan has worked in practice and as an academic developing research, presentations, publications and post graduate training in this specialised field for nearly 20 years. Susan has recently presented at International conferences and events in the Netherlands, Germany, Norway, France, Dubai and India as well as being a regular presenter at UK conferences.

Angus Hunter, Project Manager, LCB Healthcare; Managing Director, Optimat

Angus Hunter is the project manager of the LCB Healthcare project; a European Public Procurement Network funded under the Lead Market Initiative for Europe. He is also Managing Director of Optimat: a strategy consultancy specialising in the policy areas of innovation and sustainability.



He has over 25 years experience of consultancy experience following a diverse career in R&D, industry and regional economic development. Over the past 10 years he has played a highly influential role in helping industry associations in the UK to develop sustainable development strategies and key performance indicators for their sector. At a European level, he has worked with the European Commission and national ministries/agencies since 2004 on a number of projects in support of the European Research Area. This includes both policy studies and management/evaluation of ERA-NET Coordination Actions aimed at fostering cooperation, mutual learning and joint R&D activities between national programmes. His position within the LCB Healthcare project is based on his experience of European innovation networks and consultancy support to the UK Forward Procurement Commitment (FCP) programme that provides the coordination resource for the project.



Gaynor Whyles, Director JERA Consulting

Gaynor has worked for the Department for Business, Innovation and Skills (BIS) in the field of innovation procurement since 2005. She was responsible for developing Forward Commitment Procurement model and initiated and managed two successful innovation procurement demonstration projects with the Ministry of Justice and the Rotherham NHS Foundation Trust. As project co-ordinator for the LCB-HEALTHCARE PPN for the last 3 years she has worked with partners to develop pilot innovation procurement projects in the healthcare sector. This work now continues with the launch this year of EcoQUIP. She is the author of the BIS publication 'Delivering Best Value through Innovation – Practical Pathways to Buying Innovative Solutions', and lead author of the LCB-HEALTHCARE reports 'Creating Conditions for Innovation- Towards a Good Practice Guide' and the soon to be published Innovation Procurement - Delivering Efficiency, Quality and Sustainability in Healthcare.

Over the last year she has working with BIS and the UK Corporate Leaders Group on Climate Change to launch 'Down to Zero' – joint public private compacts for low carbon goods and services.

A graduate of Imperial College, University of London, in a previous life she worked for the UK Research Councils in the UK and Brussels, and headed up the European Programme of WWF-UK as well as spending time working in the private sector.

Gaynor is Director of JERA Consulting; a UK based consultancy specialising in innovation, and is passionate about the role of innovation procurement in improving public services and stimulating economic opportunities.



Agneta Granström, County Council Commissioner, Norrbotten County Council

Mrs Agneta Granström gained a master's degree in Nursing Science, Gerontology and Public Health from Umeå University, Sweden. Agneta is elected County Council Commissioner of Public Health at Norrbotten County Council, Sweden, board member of Norrbotten County Council, President of the eHealth network within

the Assembly of European Regions, AER, member of the Swedish Association of Local Authorities and Regions working committee for the e-society, board member of Nordic Telemedicine Association and board member of the eHealth Innovation Centre at Luleå University of Technology. She has worked as Chief Community Nurse, Nurse of Public Health, and as Lecturer at the Department of Health Science at Luleå University of Technology, Sweden. She has a professional background as a chief community nurse, a state registered nurse, and as a lecturer at the Department of Healthcare Sciences at Luleå University of Technology, Sweden. She has wide clinical experience in primary health care and elderly health care in rural areas

Abstract:

The County of Norrbotten, at the top of Europe, is EU's most sparsely populated region and also have one of the oldest populations. The County have as a consequence, adopted an extensive and innovative strategy were development of an integrated eHealth model to provide comprehensive support to patients and populations in the County is one key enabler. This eHealth strategy is very advanced in comparison with most of Europe. The presentation is focusing on the strategy and the importance of a solid broadband infrastructure to support new care models and eHealth services.

Marek Haber, Marcin Kautsch, Witold Ponikło

Abstract: Regional hospital collaboration in Poland: a response to privatisation in the hospital sector. Functional integration of county hospitals – Małopolska province



Marek Haber



Marcin Kautsch

Population structure changes of Małopolska province requires new approach to healthcare service delivery. At the moment there is a significant oversupply of hospital beds, seen especially in selected regions. At the same time there are regions with limited access to hospital care. On average there are approximately twice as many acute beds than needed. Due to the public purchaser policy the number of private hospitals is growing (this trend is seen all over the country). Public hospitals are owned by different owners, local / provincial,

central government and a university. There is no healthcare assets planning, growing numbers of providers causes falling margins and financial problems of both private and public hospitals. Therefore there is a need to coordinate future plans of hospital if hospitals are to survive on the more hostile market.

The overall goal of the project is to improve medical and economical effectiveness of county hospitals.

Objectives:

- Improving treatment efficiency and effectiveness offered for Małopolska inhabitants, focusing on quality and safety of delivered services.
- Improving perceived accessibility and clients' satisfaction of county hospitals.
- Improving profitability of county hospitals, allowing for their sustainability as a condition for services provision.
- Implementing a co-operation model, to be copied in other regions.

In order to achieve these objectives, the following is to be undertaken:

- Changes of wards structure and profiles
- Optimizing organization of services for patients in life-threatening situations
- Investment optimizing
- Contract (NHF) optimizing
- Resources efficiency improvements.

The tasks that can achieve the above can be described in the following way:

1. Developing an 'accessibility' map (hospital & ambulatory services) – with 10 years forecast.
2. Cross-border care analysis (other provinces).
3. Re-engineering of internal processes (standardization).
4. Negotiating and developing investments / improvement plans for network hospitals according to task (market) division in order to improve access and effectiveness of services.
5. Starting effective information exchange between hospitals (IT platform).
6. Investing in buildings and medical equipment according to the plan (# 3, # 4).
7. Starting adaptation and qualification improvements processes for the personnel in (care) priority areas.
8. Care pathways reconfiguration (quality, effectiveness improvements).
9. (optional) Supporting local authorities in transforming hospitals into companies.

Financial forecast of the project (costs in millions Euros):

Task	Min	Max
Project documentation	0.25	0.5
Investments	20	37.5
HR development	5	10
Project administration	1.25	2.5
TOTAL	26.5	50.5
Foreseen (annual) income growth:	12.5	
Foreseen (annual) cost reduction:	25	
'Net annual value':	37.5	



Christopher Shaw, Senior Director, medical architecture - Dip Arch, ARB

A specialist consultant in mental health design, Christopher has 27 years' experience in healthcare architecture. He enjoyed long involvement with the Medical Architecture Research Unit at the now London South Bank University prior to founding Medical Architecture in 1991 and has since driven the global growth of the company.

A passionate advocate for evidence based design, significant elements of his day-to-day work involve the research and evaluation of health buildings in the UK and worldwide. A particular area of expertise lies in strategic health planning to enable design for the enhancement of clinical outputs and the human experience of medical care.

He sits on the Executive Panel for Architects for Health and was an elected member of the Architects Registration Council from 1992-1996. He is a professional advisor for projects in Denmark, Turkey, Australia and Canada and continues to speak at industry events worldwide and write on environments for mental health and acute hospital care. He was on the World Architecture News award judging panel in 2011.

Phil Nedin, Arup

Phil is a chartered engineer and a director of Arup responsible for Arup's global healthcare business. This role has taken him to many regions in the world to investigate best practice solutions in healthcare engineering.



He has been with Arup for more than 23 years, currently based in the London office. Prior to joining Arup he worked for the National Health Service in a regional health authority design group in London.

Phil is a past President of the Institute of Healthcare Engineering and Estate Management (IHEEM) and is currently on their international committee. He is also a Fellow of the Institute of Mechanical Engineers and a member of the International Federation of Hospital Engineering publication advisory panel and a member of the UK Department of Health design review panel.

***Abstract:** There are many pressures on healthcare systems to change. Above all there is a serious issue relating to the financial burden that healthcare systems place on a nation's fiscal policy. The presentation will concentrate on the drivers of change that will impact on future provision of healthcare and the impact on the existing healthcare estate.*



Dr.-Ing. Joram Nauta

Project Manager, Dutch Centre for Health Assets, TNO

Dr.-Ing. Joram Nauta (1977) is project manager at the Dutch Centre for Health Assets. He focuses on the value that architecture and building concepts have for health care. From his background as a civil and industrial engineer the match between building, patient and health care organization is one of his most important research topics. Besides contributing to the defining AU! Bouwen aan de architectuur van de zorg (2005), he worked as an author and editor on the bilingual publication All Designers Use Evidence (2008) and Open Views; The Operating Theatre of the Future (2011). Furthermore he is the Dutch pilot project coordinator for the EC-funded Lead Market Initiative program: LCB-HEALTHCARE. He worked for the Netherlands Board for Healthcare Institutions from 2003-2007 and since 2008 for TNO, which now includes the Dutch Centre for Health Assets.



Liesbeth van Heel, Erasmus Medical Centre

Liesbeth trained in Facility Management and Business Administration before joining Erasmus MC as a management trainee. Since the late '90s she has been involved in the Erasmus MC redevelopment project as project secretary, also heading the Expertise group on this subject within the directorate of Corporate Real Estate. Bringing together vision and knowledge on the cutting edge between developing a good new university hospital as well as a sound and robust new building, she coordinates research on this topic within Erasmus MC and is involved in national and international orientation. She is also responsible for PR on the project.

***Abstract:** Why do few organizations (e.g. hospitals, architects, government bodies) in the Netherlands apply Pre- and Post Occupancy Evaluation (POE for short) as an instrument in systematically evaluating new or existing healthcare buildings and organizational performance within these buildings?*

After giving you a general overview of the situation and the occurrence of POE in the Netherlands (and the experiences and knowledge this has brought and might bring on a national level), we zoom into the case study of Erasmus University Medical Centre (Erasmus MC). This hospital is involved in a large campus redevelopment project (and 185.000 sqm new built), where the first phase of the new built will receive its approx. 2500 occupants early 2013, with the second phase coming in use in 2017.

Erasmus MC (the Programme Organization for the redevelopment project in conjuncture with the Institute of Public Health) has asked DuCHA to assist in a survey to be held later this year and to be repeated in 2013, in order to evaluate staff's opinion of and experience with the old versus new build environment on personal performance, safety, well-being and satisfaction, aiming to learn from this experience in preparation for the occupancy of the main hospital functions in 2017. After explaining the Dutch context and the method to be applied in this case study, we would like to welcome the audience to comment and share experience on methods and views on the usefulness of POE as a way to improve healthcare buildings and organizational performance.