ECHAA *Policy Seminar* series

ECHAA Policy Seminars

ECHAA is a partnership between a group of universities and state research institutions:

- DuCHA: an autonomous unit within TNO, the Netherlands state Organisation for Applied Scientific Research (www.tno.nl/ducha).
- HaCIRIC: a collaboration between existing research centres at a number of British universities – Imperial College, Loughborough, Reading and Salford (www.haciric.org) – and supported by the Engineering & Physical Sciences Research Council.
- IFROSS: a research and teaching institute in the law and management of health systems, part of the Université Jean Moulin Lyon 3 (www.ifross.com)
- [Institut für Technologie und Management im Baubetrieb, Universität Karlsruhe (http://www.fmk.uni-karlsruhe.de) – under negotiation]

Its purpose is, by means of comprehensive and rigorous analysis, to support and promote evidence-based policy decisions on the contribution of the built environment to the European health sector. The focus of the Centre is on long-term issues of sustainability and appropriateness of the estate – service planning, architecture/design, finance, construction and operation of hospitals and other healthcare facilities.

The Centre's bi-annual series of Policy Seminars is designed to generate and disseminate understanding about topical and policy-relevant health and healthcare issues, especially those linked to the estate and to capital investment. ECHAA's belief is that there is a strong and unmet demand for new knowledge generation and transfer is this area. The seminars:

- Bring in leading international thinkers representing a mixture of government, industry and academia capable of developing or interpreting an intellectual theme (not just "latest knowledge"), and establishing a common vocabulary for the day. Correspondingly, the seminars are based on a combination of masterclass analysis and problem-solution debate.

- Are designed to foster audience-speaker interaction, including use of "Chatham House Rules" (no attribution, outside the room, of ideas discussed inside it) when appropriate.

- Rely on networking to attract an invited, committed and informed audience, including front line decision-makers.

The next Policy Seminar is this series will be on "*Comparative PPP models in a time of recession: the options for decision-makers*", to be held at the Technische Universität Berlin, in late autumn, under the joint auspices of ECHAA and the European Observatory on Health Systems and Policies.

This event will also be invitation only, but those with an interest are suggested to contact ECHAA's Executive Director, Steve Wright (tel. +352 320892; steve.wright@echaa.eu)

Policy Seminar No.1
Credit crisis or global depression: The impact on capital planning and the health sector

London, April 28th 2009

The background to the event, and its purpose, format and speakers, are described in Annex 1, and the registered attendees are listed in Annex 2.

The event was hosted by Arup International, and ECHAA would like to express its considerable gratitude for their generous support.

Executive Summary

1. The main learning points from the Policy Seminar were:

- With the recession, the **health sector** as an economic activity has not, so far, been badly affected. Looking forward, one might speculate that Beveridge/tax health systems (national health services like in the UK, but also Italy, Scandinavia, Spain etc.) will see a slower and more confused impact than Bismarck/social health insurance systems such as Germany, France and most of Central Europe.

- There should always be ongoing debate about what health systems are actually **for**. Because this debate is likely to be more acute in the current outlook of stressed financing for public health and healthcare, a more intense focus on value for money is axiomatic.

- Governments are continually seeking ways to control healthcare demand, so far with little conspicuous success, or attempting to **move care** out of expensive hospitals to cheaper settings. These needs will become more acute.

- There is even greater incentive now to find ways of improving efficiency, looking beyond the normal concepts of "productivity", with more attention to principles such a clinical work process design, systemisation and extending to some form of 'control'.

- Investment in physical capital should not be cut as a **knee-jerk reaction** to government fiscal strain. Capital is often a prime catalyst for structural change in service delivery. Equally, however, capital investment is only sensible as part of state Keynesian spending programmes if the investments concerned are appropriate for the health sector. To be "shovel-ready", ready for construction, merely as part of a short-term stimulus package, should not be a criterion in its own right.

- The sector would do well to prepare itself for **disinvestment** in capital assets as much as new investment.

- Key sector **skills** need to be augmented, particularly in comprehensive system (including capital) planning and commissioning.

2. Overview and speaker contributions

Marcus Miller based his presentation around one of the most cogent reappraisals of modern macroeconomics – the book Animal Spirits by Akerloff and Shiller. The title relates to the term used by Keynes to explain how rational behaviour cannot be assumed for actors in economic life, and economies are thus not inherently self-regulating. During the long boom (the end-game of the "Great Moderation"), there were growing economic imbalances between Eastern countries (surpluses of exports, savings and government balance) and some Western countries (high consumption, and balance of payments and government deficits). The Asian savings glut was invested, badly, in Western housing markets, together with the creation of a consumer boom. Financial markets were characterized by untrustworthiness, in part based on the rampant fraud practiced by some individuals or companies.

As this situation unwound, many economies have spiralled downwards into a "liquidity trap". This has led to a major economic crisis, undoubtedly the worst since the 1930s which at present the recession is tracking. It looks likely that there will be two years of decline across most Western countries, with a slow, fitful and extended recovery. Wholesale reform of the banking sector's regulation (and of macroeconomics as a profession, and economic strategies by governments) seem necessary pre-requisites to climb sustainably out of the recession.

Discussant *Vanessa Rossi* emphasized the magnitude of the crisis and the economic losses. Governments were happy to collude in the process – by taxing capital markets' gains (e.g. UK) and fostering an export-based economic model (Germany).

Marc Suhrcke reviewed "common sense" opinions about the effect of recessions on health (most observers believe they will cause ill-health, though some see gains as life-style changes), and the documented evidence as to what has actually happened in the past and in different geographical areas. His conclusion is that health inequalities will worsen during the recession but not, by and large, health status overall. The impact of "diseases of affluence" such as motoring accidents will lessen but others (depression, suicide…) worsen. There is a caveat for poorer societies (EU-12 and Accession, Western Balkans) which are likely to be worse hit, across the board, than rich ones. Equally, distinctions should be drawn between mental and physical diseases (the former group will very probably rise). And finally, given that historical experience is of recessions which on balance have been milder and shorter than the current very deep and severe situation, we need to be cautious whether the epidemiological lessons of the past will apply this time. Health systems should ideally react to prioritise the issues which can be expected to arise (inequality, mental disease), rather than assuming that crude health status as a whole will deteriorate.

Discussant *Martin McKee* developed some of these themes, noting that people's resilience to economic hardship varies. Factors such as social support, active government labour market policies and avoidance of positively destructive social and economic policies are important.

Marcel Smeets suggested that the recession was likely to expose problems even with successful social models such as non-profit health insurance. When linked to employment status, it is evident that rising unemployment will damage the viability of the companies. Premiums will have to rise. But this should be coupled with efforts to reduce costs in healthcare systems which are usually rather inefficient.

Michel van Schaik emphasized the complexity and narrowness of country health markets for the international banking sector. It is, however, stable and the attractiveness of the market is

likely to be re-appraised in coming years. Cooperative banks offer an interesting model for operation in the sector.

Further reading

IMF (2009a). World Economic Outlook. International Monetary Fund. Washington, April 2009.

IMF (2009b). Fiscal Implications of the Global Economic and Financial Crisis. Staff Position Note 09/13. June 2009.

Rechel, B.; Wright, S.; Edwards, N.; Dowdeswell, B. and McKee, M. (2009). Investing in hospitals for the future. World Health Organisation, on behalf of the European Observatory on Health Systems and Policies.

Rechel, B.; Erskine J.; Dowdeswell, B.; Wright, S. and McKee, M. (2009). Capital investment for health. World Health Organisation, on behalf of the European Observatory on Health Systems and Policies.

Stuckler D.; Meissner C.M. and King L.P. (2008). Can a bank crisis break your heart? *Global Health*. January 2008.

Stuckler D.; Basu S.; Suhrcke M.; Coutts A. and McKee M. (2009). The public health effects of economic crises and alternative policy responses in Europe: an empirical analysis; *Lancet*, July 2009.

Stuckler D.; King L.P. and McKee M. (2009). Mass privatization and the post-communist mortality crisis: a cross-national analysis. Lancet. January 2009.

Wright, S. (2009). Is PFI funding built to last? *Health Services Journal*. August 2009.

Presentation 1 ***Marcus Miller*** ***(Professor of Economics at Warwick University and 2008 Houblon-Norman Fellow at the Bank of England)*** *(PowerPoint on ECHAA website)*

Some of the key ideas in Professor Miller's review were based on George A. Akerlof & Robert J. Shiller's recent book *Animal Spirits: How Human Psychology Drives the Economy and Why It Matters for Global Capitalism*, Princeton University Press, 2009. The Akerlof & Shiller insight (or rather, reminder, since the term 'animal spirits' refers to one of the concepts in Keynes' *General Theory*) is that rational economic behaviour as assumed in both microeconomics and macroeconomics fails in the theories of the latter domain to demonstrate that capitalist economies will **not** be stable and self-regulating. New behavioural economics, not populated by *homo economicus*, has penetrated into micro but not macroeconomics.

Miller pointed out that the world economy has been characterised by growing trade imbalances between groups of countries – essentially surpluses in the East (China) and deficits in the West (US & UK). With the normal macroeconomic accounting identities, these also translate into corresponding fiscal and consumption/savings imbalances. These imbalances are representative of "Eastern caution" (savings gluts) and "Western exuberance" (asset, particularly housing and property, bubbles).

Keynes had warned during the 1930s that economic circumstances could exist where no interest rate (the price of supplying and demanding money) would balance the markets for money and goods. There could be a "liquidity trap", where the rate of interest hits zero - it cannot go further - and at this point additional injections of money by the national central bank have no mechanism to change the savings (and by extension, consumption) behaviour of economic agents. If the economy goes into recession through the operation of the business cycle, and the trend is serious enough, the economy can hit the liquidity trap and monetary policy will not lift it out. Miller argued that the reversal of the exuberance through to 2007 generated such a progression and in enough countries that it amounts to a global liquidity trap.

House and also commercial property prices in many Western countries (US, UK, Spain, Ireland, Australia…) evidently overshot and are now collapsing. With many banks and non-bank financial firms damaged or fearing damage in property lending markets, credit interbank rates (for bank from bank borrowing) spiked very high (>4%), indicating that banks do not trust each other. The Akerlof 1970 idea for the used car market ("lemons") - that buyers cannot trust sellers, and will therefore not pay more than the average price even for good used cars - can apply in the finance markets too, or worse, because there are no independent sources of information, such as car mechanics, for finance market participants. And this is quite apart from Madoff-style outright thievery in finance markets.

National GDP performance during this recession is tracking 1930s experience so far (in other words, worse than "normal" post-War recessions) and, optimism aside, may continue to do so as the recession unwinds. When asset bubbles burst, the overshoot can be very low (c. 50% below the peak). The finance sector will have to restore bank balance sheets and the integrity of credit markets; there will be more regulation; governments will have to endeavour to maintain demand domestically with more international collaboration; and academia will need to establish new microeconomic foundations for macroeconomics, and learn the lessons from history.

Discussant Vanessa Rossi *(Senior Research Fellow, International Economics Programme Chatham House)* pointed out that the economic crisis is of similar proportions to a full-blown flu epidemic (though, mostly, without the deaths – however, see the next presentation). We do need to be careful about accounting identities (e.g. trade and fiscal balances) being

treated as having a behavioural content. This is not a 1 in 25 year, "normal" crisis but more like a 50+ year event. We need to understand business cycles better, and the herd instinct that often underlies them. Investment in the boom years was done poorly – it was easier to flush the money through property/housing markets than to choose economically-productive capital assets. This often involved collusion by governments, which were happy to cream tax gains off high-earners in the banking sectors (and spend the resources often in social sectors like health and education, a process which is now unsustainable). With the crisis, budget targets have been wrecked – the UK is a particularly bad example but there are others, and Central and Eastern Europe potentially stand to have major losses. Concerning the role of economics, it has to be said that many relationships seem to work well enough only while "other things are equal". The economic financial value losses of the crisis may amount to $50 trillion (how big are national discretionary recovery programmes compared to that?).

Other contributions:

- There are similarities between the sort of observational studies done in epidemiology and macroeconomics – understanding broad behaviour in normal circumstances can lead to errors when times turn abnormal;
- Perhaps there should be a Hypocratic Oath for financial advisers, to bring an ethical component into an industry where professional standards do not seem to demand them;
- Recessions associated with banking crises are more severe than normal economic cyclical downturns, and banking crises associated with housing bubbles are worse than normal banking crises;
- Legal structures have not caught up with sophisticated modern financial instruments;
- We cannot allow the banking system to lose money, ask for support then expect to remain independent;
- Monetary policy in the form of "quantitative easing" has essentially dovetailed with fiscal policy; it appears to be ineffective but in fact maintaining interest rates very low for a long period will, with a lag, eventually have an effect. Despite present gloom, it is likely that this, combined with the fiscal "automatic stabilisers", will help pull the economy round, and the stockbuilding cycle may be the trigger for recovery (though it can lead to "double-dip" profiles of output);
- China is a key. There will need to be serious investment there in health and education, and the social safety net, given that the one-child policy removes the traditional support for the older generations. One implication is the need to understand the proportion of social expenditures which are in reality not spending but investment in human capital ("pension policies are better than having kids").

Presentation 2 Marc Suhrcke (Professor of Public Health Economics, University of East Anglia) *(see full paper on the ECHAA website, details for which are not reprinted here. PowerPoint also on ECHAA website)*

Professor Suhrcke started from the point that a conventional (and perhaps common sense) view of economic crises, such as from the Director General of WHO, implies that they are bad for health. However, some commentators suggest on the contrary that they are a "lifestyle blessing in disguise". Professor Suhrcke's focus was on 'health' rather than 'healthcare'.

There had been some suggestions that income and wealth could move in the opposite directions from each other (witness an old graphic which indicated that decadal change in life expectancy in Britain for the last century moved inversely with decadal growth rates). Christopher Ruhm was one of the first researchers to question more rigorously on the basis of the evidence whether an economic recession leads to falling health status; his analyses showed a 0.5% death rate **decrease** from 1 percentage point increase in unemployment (except for suicide: 1.3% up).

The effect of recessions on health inequalities within countries is complex – confirmed for some countries (Japan, US) but paradoxically for Finland, during the steep 1990s recession following the collapse of the Soviet Union, the increases in inequality were less than those seen during growth years.

Professor Suhrcke's own results in the joint paper developed with David Stuckler (Annex 2) were that at the gross level the historical data show little impact of recessions (for a 1% growth in unemployment), for rich countries. Suicide rates rise, drug-related deaths fall. For cases where unemployment rises by 3%, there are much larger changes though – suicide and homicide rise and alcohol-related mortality and again drug-related fall. Heart disease is unaffected.

In essence, diseases linked to affluence decrease in developed countries during economic downturns. Inevitably, this is less of a cushioning factor in developing countries, where the evidence shows that recessions are on balance deleterious to health. For example, Indonesia and Thailand, during their 1990s slumps, suffered significantly (though interestingly, Malaysia, which opted out of IMF programmes to correct economic imbalances, showed no overall impact on mortality from the same regional recession).

It is not clear the extent to which these complex findings apply for a very severe downturn (as in the current situation; c.f. the presentation by Professor Miller). Furthermore, the difference between impacts on physical health, and those on mental health, need to be watched carefully. There may be some opportunity to introduce measures in advance of an economic downturn which will be protective later of the vulnerable (expansion of health insurance – US – would have been a case in point).

Discussant Martin McKee *(Professor of European Health Policy, London School of Hygiene & Tropical Medicine)* asked why some people are resilient to decreases in income whereas others are not. There has been a whole series of natural experiments which can be interrogated (e.g. the case mentioned above of Indonesia/Thailand vs Malaysia). Another interesting case was the mass privatisations of the former Communist bloc, comparable in magnitude in their effects to the Great Depression. There appear to have been three results – firstly, people survive such events better where there is a high level of social support (single men suffered worst) and thus the shock therapy impacted less on the 35%+ of the population with membership of trade unions and church etc. Secondly, active government labour market and social programmes where present are effective in reducing

suicide rates (this also of course helps to preserve the skill base for the recovery from recession). Finally, governments should ensure that they do not adopt policies which are actively destructive – Russia saw a massive increase in production of industrial alcohol and alternative products such as aftershave which had a major impact in facilitating a binge-drinking culture on cheap alcohol (note that the Great Depression might have had the same result but Prohibition took the edge off it).

Other contributions:

- Some English Primary Care Trusts are already attempting to reprioritise on health inequality measures;
- Could income inequality fall in recessions (fewer boom sectors overpaying), and might this then be a channel to help health status?
- We need to watch the impact on the elderly, who are normally big healthcare consumers. So far, there appears to be little effect on the old, and this is particularly true as long as they can access pharmaceuticals – but the US may be a case where this is different;
- One national policy implication, difficult as it may be to execute in a slump, would be to avoid cutting development aid budgets;
- There does not seem to be a big difference in the mortality impact during recessions between healthcare system types (Beveridge vs Bismarck);
- Different systems of protection seem to work in cases of adversity (e.g. informal crop insurance vs formal national insurance in India), which may hold lessons for promotion of social protection in developed countries;
- The profile of health during economic downturns can be the result of factors underway from some time before.

Marcel Smeets (AIM, Director-General, International Association of Mutual Benefit Societies)

- Private but not-for-profit insurers are attractive to governments; mutuals and cooperatives do constitute a sustainable economic model;
- Maybe worse than the credit crisis is the social crisis, which will come. AIM's member insurance groups do not so far report major problems, possibly because of adequate reserves, but these will inexorably come, within the next three years. The health sector has not received explicit support during this crisis (unlike banking and autos);
- Budgeting in this sector has been based on an assumption of economic growth, but this is becoming disingenuous – in the future it will not be supportable for premium rates to grow faster than incomes in general, even if this was feasible in the past. Membership contributions will fall with rising unemployment and falling incomes, and there may be rising costs on insurers because of the crisis too (such as because of risky behaviours);
- Competition and use of market mechanisms is often seen now as a solution. The recent reforms in the Netherlands are a case in point. This may not be sustainable – see for example a recent study for 2009-2014 suggesting that the NL system needs €14 billion more, but only €4 bn. Is available. If costs cannot be cut, the only alternative would be to raise premiums, potentially doubling them. Germany, which introduced changes in July 2008, shows similarities. If there are inadequate resources in a general healthcare fund to reimburse social insurers for rising costs, premiums will have to rise to fill the potential €5-8 bn. gap, and for each 100 000 extra unemployed, the gap rises by €70 million. In any event, co-payments are certain to rise to relieve the stress on insurers;

- The healthcare sector is inefficient. And if the patient pays more, (s)he will want to control more of the process and outcome.

Other contributions:

- We all talk about taking demand out of the hospital and into other settings which may be cheaper and/or clinically more desirable, but this is difficult. Advanced diagnostics often promptly throw up evidence of more treatable conditions;
- Broadly, there is convergence between tax and SHI systems in the actual functioning of the systems. Maybe Beveridge systems will find it a bit easier to handle the crisis, whereas SHI systems have privatised the risk and are suffering or anyway will suffer income loss. This may also be an issue for long-term care
- It is important to consider legacy and national differences of healthcare systems (impact on transferability of policy interventions etc.)
- The data available for planning healthcare projects are poor (no understanding of utilisation rates etc.).

Michel van Schaik (Rabobank) *(PowerPoint on ECHAA website)*

- The human capital sectors and especially health are complex markets, with a poor reputation. The long maturities are not attractive to banks because they make the balance sheet inflexible. There are limited opportunities for cross-selling of financial products. Markets tend to be segmented between countries;
- But times are a'changing. Government budget (fiscal) constraints may increase the possibilities for private sector involvement, including for-profit investors. As an example, Rabobank is involved in the €500 mn. Zwolle hospital project, providing refinancing, working capital and equipment. Insurance funds are now looking cross-border;
- The sector is quite regulated, and/but this gives it some stability. Governments may be inclined to step in and rescue healthcare institutions which run into problems but no bank wants such support to be unconditional since it removes discipline;
- Cooperative banks have a place in the spectrum of financing agencies. They have a different ethos – rooted in and interested in their local markets (though this does not mean they are any more in favour of white-elephant projects than their for-profit finance competitors);
- Health projects can be good on a bank portfolio basis since there will be spin-offs across a region, including to Small and Medium-sized Enterprises.

Other contributions:

- The way that banks classify their business may vary. So it may not in reality be such a Cinderella sector as appears;
- It is good to come across a banking institution with a moral stance (quite a comparison with other market players)!
- The Dutch healthcare market hasn't settled down yet after the reforms. It isn't clear that the DBC (DRG) system will throw up enough capital contribution, but on the other hand there are reasonable contracts, often multi-year, between doctors and hospitals and insurers and hospitals;
- 'Sustainable funding' is crucial - unviable healthcare projects will not survive (& will face difficulties in getting private funding)
- There is a need for evidence-based decisions in healthcare projects
- We need to rethink healthcare assumptions (e.g. inpatient vs. outpatient; telecare; acute hospitals; role of polyclinics).

ECHAA

European Centre for Health Assets and Architecture

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Annex 1

Credit Crisis or Global Depression: The Impact on Capital Planning and the Health Sector

28 April 2009, 8:30-17:00. Ove Arup & Partners, 8 Fitzroy Street, London, W1T 4BJ

Organised by

the European Centre for Health Assets and Architecture (ECHAA)

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- HaCIRIC: an inter-institutional collaboration between existing research centres at a number of British universities – Imperial College, Loughborough, Reading and Salford (www.haciric.org)
- IFROSS: a research and teaching institute in the law and management of health systems, part of the Université Jean Moulin Lyon 3 (www.ifross.com)
- [Institut für Technologie und Management im Baubetrieb, Universität Karlsruhe (http://www.fmk.uni-karlsruhe.de) – under negotiation]

ECHAA's purpose is, by means of comprehensive and rigorous analysis, to support and promote evidence-based policy decisions on the contribution of the built environment to the European health sector. The focus of the Centre is on long-term issues of sustainability and appropriateness of the estate – service planning, architecture/design, finance, construction and operation of hospitals and other healthcare facilities. However, the Centre is being launched at a time of economic crisis, originating in localised credit markets but now impacting on activity right across the world economy. The recession may be extremely long-lasting and deep. In this environment, decision-makers in both the public and private healthcare sectors need a route-map and a timetable.

This **ECHAA** conference will explore two themes – firstly, a judgement on the severity and duration of this crisis, and its effect on health. Secondly, a discussion of impact of this crisis specifically on healthcare infrastructure development, informed from the viewpoint of sector participants such as governments, insurance funds, hospital groups, financiers and the public service industry.

The invitation-only meeting will start with two keynote speakers to set the scene and develop a vocabulary for the rest of the day – Marcus Miller, Professor of Economics at Warwick University and 2008 Houblon-Norman Fellow at the Bank of England and Professor Marc Suhrcke, Professor of Public Health Economics at the University of East Anglia and WHO expert on the interaction between health and wealth. Professors Miller and Suhrcke will each prepare a paper in advance of the event. The subsequent presentations and discussions on healthcare asset development in the current and foreseeable economic environment will be as participative as possible.

Purpose of the event

- Informal launch of ECHAA
- To engage decision-makers on the impact of the credit/economic crisis on hospital and healthcare infrastructure development

Attendees

- Health sector management
- Public services industry (commercial contractors)
- Commercial & investment banks
- Financial advisers
- Health academic institutions
- Civil society
- International organisations
- ECHAA Partners and Associates

Programme

8.30 Registration and coffee

Theme One – Introductory session

08.50 Welcome from the Chair (Marinus Verweij, Chairman of ECHAA)

09.00 Causes, severity and duration of the recession (Marcus Miller, Professor of Macroeconomics, Warwick). Discussant (Vanessa Rossi, Senior Research Fellow, International Economics Programme Chatham House). Q&A.

10.00 Impact of the recession on health (Marc Suhrcke, Professor of Public Health Economics, UEA). Discussant (Martin McKee, Professor of European Health Policy, London School of Hygiene & Tropical Medicine). Q&A.

11.00 Coffee

Theme Two – Discussion & short presentations, sector representatives:

11.30 Commercial bank (Michel van Schaik, Rabobank)

12.00 Public services industry contractor (Phil Nedin, Arup)

12.30 Social health insurance agency (Marcel Smeets, Director-General International Association of Mutual Benefit Societies)

13.00 Lunch

14.00 **Plenary discussion – how bad, and what to do?** Facilitated by Marinus Verweij and Steve Wright (Executive Director, ECHAA)

15.30 Coffee

16.00 **Final conclusions, sum-up and close (Marinus Verweij)**

Annex 2

First name	Surname	Title	Affiliation	Speaker
Jonathan	Ainley	Associate	Arup	N
Phil	Astley	Senior Lecturer/Architect	MARU South Bank University	N
Roberto	Astolfi		OECD	N
Antti	Autio	Project Manager, Researcher	HEMA University of Helsinki	N
James	Barlow	Professor	Imperial College Business School	N
Jaime	Bishop		FLEET Architects	N
Chris	Blades	Economic Adviser	European Investment Bank	N
Jeni	Bremner	Executive Director	EHMA	N
Jérôme	Boehm	Policy Officer Health Systems	DG-SANCO	N
Deh	Chien	Research Postgraduate	Centre for Environmental Policy	N
David	Clark	Managing Director	Belair Advisers	N
Marilyn	Clark	Director	FIPRA	N
Mike	Clarke	Health Sector Manager	Willmott Dixon	N
John	Cole	Chief Estates Officer	DHSSPS (Northern Ireland)	N
Matthew	Custance	Director Healthcare Projects	KPMG	N
Barrie	Dowdeswell	Director of Research	ECHAA	N
Celine	Druilhe		Sg2	N
Jonathan	Erskine	Executive Director	EuHPN	N
Joe	Farrington-Douglas	Senior Policy Manager	NHS Confederation	N
Sue	Francis	Special Adviser for Health	CABE	N
Rosemary	Glanville	Head	MARU South Bank University	N
Gavin	Hailes		Laing O'Rourke	N
Mark	Hellowell	Research Fellow	CIPHP University of Edinburgh	N
Ralph	Hughes	Policy Officer	European Public health Alliance	N
Jeroen	in 't Veld	Director	RebelGroup	N
Rachel	Irwin	Research Assistant	London School of Economics	N
Helinä	Kotilainen	Chief Architect	National Institute for Health & Welfare (Norway)	N
Tim	Leeder	Chief Executive Office	Immune System Bank	N
Tiziana	Leone	Lecturer	London School of Economics	N
Hans	Maarse	Professor Health Care Policy Analysis	University of Maastricht	N
Adrian	Marriott	Director of Consulting	Tribal	N
Jane	McElroy	Director	YRM	N
Martin	McKee	Professor European Health Policy	London School of Hygiene & Tropical Medicine	Y

Marcus	Miller	Professor of Macroeconomics	University of Warwick	Y
Rebecca	Miller	Senior Analyst	Sg2	N
Joram	Nauta	Researcher	TNO DuCHA	N
Phil	Nedin	Director	Arup	Y
Sue	O'Connell	Chief Executive	Community Health Partnerships	N
Jens	Roehrich	Research Associate	Imperial College Business School	N
Vanessa	Rossi	Senior Research Fellow	Chatham House	Y
Marc	Sansom	Marketing & Communications Director	International Academy for Design & Health	N
Marcel	Smeets	Director General	Association Internationale de la Mutualité	Y
Maire	Smith			N
George	Stevenson	Managing Director	Activeplan Solutions Ltd	N
David	Stuckler	Researcher	University of Cambridge	N
Marc	Suhrcke	Professor of Public Health Economics	University of East Anglia	Y
Miklós	Szócska	Director	Semmelweis University	N
Michel	van Schaik		Rabobank	Y
Marinus	Verweij	Chairman	ECHAA	Y
Didier	Vinot	Professor	Université de Lyon	N
Sharon	Welby	Assisstant Director Capital Projects	St George's NHS Healthcare Trust	N
Ewan	Willars	Head of Policy	RIBA	N
Steve	Wright	Executive Director	ECHAA	Y
xx	xxx	Strategic management team	Activeplan Solutions Ltd	N