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Health in the *ESR*: Observations and Reflections

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Abstract: This article surveys articles relating to health in the ESR, identifying and reviewing broad research themes, and offering some observations and reflections on the more than fifty contributions to date. The majority of health articles tend to be empirical or applied in nature, often with an explicit policy focus, and there has been a marked increase in the number of health publications in the past decade, in part reflecting the now widespread availability of new high-quality microdata. A notable focus of a large number of articles has been on inequalities or disparities in health care utilisation, health outcomes, and health behaviours. Overall the ESR has made a meaningful contribution to the dissemination of high quality, impactful and policy-relevant health research over its fifty years. Nonetheless, there are a number of important health-related topics that have, somewhat surprisingly, received scant attention to date in the journal.

> *The causal factors in health are many, and the provision of medical care is only one.* Kenneth Arrow, 1963.

I INTRODUCTION

To date, more than fifty articles relating to health and health care have been published in the *ESR*.[1] These contributions were not spread evenly over the years, with only six articles in the first ten years of the journal, compared to more than twenty in the past decade. Reflecting the widespread importance of the topic,

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[1] These are listed in chronological order in Table 1 in the Appendix.

as well as the vast range of relevant issues, there have been contributions from economists, sociologists, epidemiologists, and a range of health and social care professionals, most of whom were Irish-based, though with some notable exceptions. Over the years there has been a shift to more empirical and applied research, often with a distinct policy focus. There has also been a little controversy.

This article surveys articles relating to health in the *ESR*, identifying and reviewing broad themes where the journal has made a meaningful contribution to research dissemination. Michael Grossman showed that the demand for health care is derived from the demand for health (Grossman, 1972), so it is not surprising then that the first theme concerns health care services, with a large number of *ESR* articles examining a range of interesting demand and supply issues over the years. The second theme concerns health across the lifecourse. For obvious reasons, health is a particularly significant concern for the young and the old, and numerous authors have addressed important issues for these cohorts. The third set of articles relates to risky health behaviours, in particular cigarettes, alcohol and obesity. This theme has been a constant in the *ESR* over the years, and an important and relevant one, given that Arrow (1963) notes "the causal factors in health are many", while Cawley and Ruhm (2011) highlight that "risky health behaviours … are a major source of preventable deaths".

Not all of the articles published fit neatly into these three broad themes – indeed some straddle two or even all three – and there have also been a number of more 'stand-alone' contributions that are interesting in their own right and which are also reviewed here. In addition, there are also important health-related topics that have, somewhat surprisingly, received scant attention to date in the journal, and some of these are highlighted.

II HEALTH CARE SERVICES: DEMAND AND SUPPLY ISSUES

Not surprisingly for a journal with a major economics focus, there has been a number of important and influential contributions relating to the demand for, and supply of, health care services, and GP services in particular.[2] A particular stand-out in this regard is A. Dale Tussing's article on "Physician-induced Demand for Medical Care: Irish General Practitioners" (Tussing, 1983). According to Tussing, "some demand for GP services is induced by the GPs themselves, for self-interested economic reasons", a conclusion drawn from the observation that return visits with GPs vary with the ratio of GPs to population. According to Madden (2007), the Tussing article was important since it played a role in the reimbursement system

[2] GP services are of interest to those considering the health sector for a variety of reasons. For example, in their article, McGregor *et al*. (2006) used data for Northern Ireland to examine the role of GPs as 'gatekeepers' to other services. Furthermore, the Republic of Ireland is unusual in that a large proportion of the population must pay out-of-pocket for primary care, and GP care in particular (Nolan, 2017).

for Medical Card patients being changed from fee-for-service to capitation in 1989, thus removing any incentive for GPs to induce visits from Medical Card patients. However, in another article (not in this journal), Madden *et al.* (2005) failed to find evidence for supplier-induced demand using difference-in-differences between Medical Card and non-Medical Card visits before and after the change in reimbursement. Building on that article, Madden (2007), this time in the *ESR*, examined the time-series properties of doctors' fees in Ireland to assess whether a structural change in the series was observed at the time of the change in reimbursement in 1989. Such a break, Madden claimed, would be consistent with doctors responding to the reimbursement change in a manner predicted by supplier-induced demand behaviour. However, no such evidence was found, casting doubt on Tussing's conclusion.[3]

Another area of controversy, and one also with important policy implications, concerns the roll-out of free GP care for all private patients in Ireland. In a recent article, Paul Gorecki examined previously published evidence on the likely impact of the policy, which estimated an additional annual 4.4 million GP visits. However, Gorecki cautioned such estimates likely drastically overestimate the impact of free GP care due to methodological and sample selection issues, with his central estimate at around an additional 2.5 million annual visits (Gorecki, 2018). In either case the move to universal GP care in Ireland is likely to have significant cost implications, and in their detailed assessment of these, Sheelah Connolly and co-authors estimated that free GP care will likely add between 2 and 3.5 per cent to overall public health care expenditure and up to 1.2 per cent to total health care expenditure (Connolly *et al*., 2018).

While the previous articles focussed primarily on GP services, Richard Layte and Brian Nolan examined a much broader range of services in their comprehensive article "Equity in the Utilisation of Health Care in Ireland" (Layte and Nolan, 2004). They focussed on the extent to which there is equal treatment for equal need, irrespective of income, and found that:

> *almost all services, apart from dental and optician services, are used more by those at the lower end of the income distribution, but that this group also have the greatest need for health care.*

Once confounding factors were addressed, they found that hospital services were distributed equitably across the income distribution, whereas GP and prescription services tended to be pro-poor (used more by those with lower incomes for a given

[3] It is worth stressing here that there is a lot of empirical evidence that the behaviour of both providers and users is affected by the financial incentives that they face, and thus it may be fair to conclude that Tussing's conclusion remains 'unproven', as opposed to 'disproven'. In their article, Brick et al. (2012) developed a conceptual framework to examine how current financial incentives in Irish health care conflict, and highlighted areas where such incentive structures are incompatible with existing policy priorities.

health status) and dental and optician services tended to be pro-rich (used more by those with higher incomes for a given health status).[4]

On the supply side, a number of interesting articles have considered issues relating to efficiency and performance of hospitals and primary care. For example, McKillop *et al*. (1999) examined efficiency in Northern Ireland hospitals in an attempt to investigate whether the evidence supported a rationalisation policy for hospital provision. They concluded that there was cautious support for expanding larger hospitals and restructuring/closing smaller hospitals, but warned that "the expansion of large hospitals may not yield substantial efficiency gains". Gannon (2005) also examined the efficiency of hospitals, focussing on the identification of poorly performing hospitals in the Republic of Ireland. She found that regional/general hospitals are generally highly efficient in relative terms, with county hospitals less efficient. In an article examining length of stay (LOS) of in-patient stroke discharges in Irish acute hospitals, Conor Keegan and Samantha Smith found associations between LOS and variables such as MRSA infection, availability of brain imaging and discharge destination. They also found some evidence that acute 'stroke units' were associated with lower LOS. Boate (2011) also examined the efficient delivery of health care services, considering the role of competition in primary health care in Ireland. She showed how;

> *well-designed regulations and systems for State funding of primary health care can ensure that competition works well and contributes to the better availability and quality of services at the lowest possible cost.*

III HEALTH ACROSS THE LIFECOURSE

The past decade has seen seven articles in the *ESR* focusing on perinatal, child and maternal health, in sharp contrast to the first four decades, with only a single article. Social gradients in perinatal outcomes were a focus of three articles, with Nolan and Magee (1994) first showing significant effects of socioeconomic background on both perinatal mortality and low birthweight; Layte and Clyne (2010) finding the 'Celtic Tiger' years were accompanied by a significant reduction in perinatal mortality differentials; and McGovern (2013) also finding evidence of a strong social gradient in birthweight. Birthweight is an important indicator of infant health in general and, in his article, Mark McGovern presented credible evidence that it is also a strong predictor of a number of child outcomes at age nine, including test scores, hospital stays and health. In their article "Socio-economic Inequalities in Child Health in Ireland", Anne Nolan and Richard Layte found limited evidence

[4] Layte (2007) further developed this analysis by considering equity in the utilisation of hospital inpatient services using an improved measurement of health need.

that disparities are stronger for more subjective indicators of child health, when compared to disparities in objective measures (Nolan and Layte, 2014).

One important determinant of both infant and maternal health is mode of delivery, and a number of recent articles have addressed this topic.[5] Brick and Layte (2011) explored levels and trends in the prevalence of Caesarean section delivery in Ireland between 1999 and 2007, while Gillespie *et al*. (2019) considered the importance of antenatal care pathways for mode of delivery, focussing on the impact of midwifery-led care, which the Government has pledged to expand. Relatedly, Patricia Kennedy presented an interesting discussion of how an unexpected event, the withdrawal of insurance from two maternity units in the North-East of Ireland and their subsequent closure, led to significant change in the provision of maternity services in that region (Kennedy, 2012). Somewhat prophetically perhaps, Kennedy concluded those changes "have the potential to lead to further change in the shape of maternity services provision in Ireland", including more midwifery-led care.

At the other end of the age distribution, Ireland's population is ageing, with recent and forecasted growth in both the number and proportion of older people. This presents policymakers with a range of challenges, in particular in relation to health and social care. Several articles have considered issues relating to ageing and health, with notable contributions relating to debates around care provision, and informal caregiving in particular. Eamon O'Shea and Rosaleen Corcoran were the first to consider economic issues around care of the elderly in this journal, noting "it seems increasingly inappropriate to treat informal care as a free good given the range of opportunity costs identified by carers" (O'Shea and Corcoran, 1989). Indeed, almost twenty years later, Hanly and Sheerin (2017) estimated the annual total economic value of informal care in Ireland as being between €2.1 and €5.5 billion, depending on the valuation approach adopted.[6] In other ageing- and care-related studies, O'Shea and Murray (1997) examined care provision and dependency in long-stay institutions, while Phillips and Neill (1995) looked at referrals to the Hospice Service in Ireland. There have also been important contributions that have examined socioeconomic disparities in mortality rates for Ireland. For example, Nolan (1990), O'Shea (2002), and Layte and Nolan (2016) all showed significant divides between those better and worse off.[7]

[5] Breastfeeding has also been linked to better child outcomes and Brick and Nolan (2014) considered disparities in breastfeeding rates by maternal country of birth. Irish born mothers were much less likely to breastfeed than non-Irish born mothers, most likely due to strong cultural/attitudinal differences in breastfeeding behaviour between the two groups.

[6] In an earlier article, Trépel (2011) estimated the informal costs of dementia care, an increasingly important issue for policy. It identified a need to improve the efficiency of formal dementia services in order to reduce reliance on informal care.

[7] These articles are reviewed in Cormac O'Grada's survey of demography articles in this issue and are thus not considered in more detail here.

IV RISKY HEALTH BEHAVIOURS: CIGARETTES, ALCOHOL AND OBESITY

At the time of the *ESR*'s inception, half of the Irish adult population were smokers. Perhaps it is no great surprise then that tobacco consumption featured in the journal's early years, with two articles on the topic included in its very first issue.[8] Keith Wilson's article examining smoking among Dublin school children contained the remarkable finding that "by the age of sixteen years roughly three-quarters of the boys and a fifth of the girls have smoked" (Wilson, 1969).[9] Taking an alternative perspective on the topic, W.K. O'Riordan estimated the price elasticity of demand for tobacco in Ireland and, somewhat amusingly for a reader today, concluded that:

> *tobacco processors can validly claim that they are being victimised: that tax increases bringing a relatively small amount of revenue cause serious shocks to the industry* (O'Riordan, 1969).[10]

Motivated by the health consequences of smoking, Brendan Walsh examined health education and the demand for tobacco, finding that "higher tobacco prices are more effective than anti-smoking campaigns or curbs on advertising as a means of reducing consumption of tobacco" (Walsh, 1980). Denis Conniffe also contributed to the debate, showing that:

> *the proportion of smokers seems unaffected by price or income, but shows a substantial downward trend related to health concerns. In contrast, consumption by smokers shows no such trend, but is affected by price with a relatively low price elasticity* (Conniffe, 1995).

The central role of alcohol in Irish society is also reflected by a number of publications in the *ESR*, particularly in its early years.[11] In their article, "Economic Aspects of Alcohol Consumption in the Republic of Ireland", Brendan Walsh and Dermot Walsh noted that an unusually high percentage of Irish personal expenditure was devoted to alcohol and that while this was mostly due to the very high relative price of alcohol, "it does imply that the Irish attach great importance to alcohol consumption" (Walsh and Walsh, 1970). They cautioned that their findings "merit

[8] In addition, the landmark "Smoking and Health: Report of the Advisory Committee to the Surgeon General of the United States had been published in 1964, highlighting the negative health effects of tobacco smoking.
[9] Crube *et al*. (1984) examined smoking behaviours, intentions and beliefs among Dublin primary school children, also finding high rates of smoking and differences by sex.
[10] Paddy Geary responded to O'Riordan's article (and another on petrol), noting "the social desirability of the taxes could not be judged without extensive investigation of the effects of the consumption of the two products" (Geary, 1973).
[11] It is also worth highlighting that the markets for tobacco and alcohol exhibit some of the classic features of market failure that tend to be of interest to economists, such as externalities and imperfect information.

serious consideration in connection with any assessment of the prevalence of 'alcoholism' in Ireland". The same two authors returned to the issue of alcohol in their 2011 article "Suicide in Ireland: The Influence of Alcohol and Unemployment". They found that alcohol consumption was a significant influence on the suicide rate among younger males over the period 1968-2009. In other noteworthy alcohol-related contributions in the *ESR*, O'Connor (1973) presented an interesting methodological contribution on the measurement of levels of drinking, while Thom (1984) estimated demand systems for Irish consumption of beer, spirits and wine.

A third, more recent, focus of attention in the area of risky health behaviours concerns obesity. With rising levels of body mass index emerging as an increasingly important public health concern internationally, Edel Doherty and co-authors noted that "over half the adult population [in Ireland in 2007] are now considered to be overweight or obese", with important implications for health services in terms of increased health care utilisation (Doherty *et al*., 2012). They cautioned that "given trends, overweight and obesity are likely to present an increasing challenge to the health service in the future". However, it is not just rising levels of overweight and obesity that are of concern to policymakers, so too are disparities. David Madden examined the socioeconomic gradient in adult obesity rates and found some evidence that disparities were more pronounced in women than in men (Madden, 2013). Spanning a range of risky health behaviours, Hudson *et al*. (2015) examined income-related inequality in smoking, low physical activity and frequent alcohol consumption for older adults from the Republic of Ireland and Northern Ireland. While they found inequalities in health behaviours among older people across the island of Ireland, an interesting finding was that smoking and low physical activity were more concentrated among the poor, while frequent alcohol consumption was more concentrated among those who are better off.

V OTHER HEALTH TOPICS

It is somewhat surprising, given that uncertainty is a key and defining feature of health care markets (Arrow, 1963), not to mention its significant policy importance (Nolan, 2017), that in the fifty years of the *ESR* only three articles have considered issues relating to health insurance. The first, Janssen *et al*. (1994), assessed the progressivity consequences of health insurance reform in the Netherlands, while Somerville (1998) presented an overlapping generations model of the demand for medical insurance. More recently, Keegan *et al*. (2017) examined market segmentation and incentives for risk selection in the Irish private health insurance market. In particular, they focussed on the Irish risk equalisation scheme in the voluntary health insurance market, suggesting the current design could be enhanced through the introduction of diagnosis-based risk adjusters.

Another topic to receive relatively limited attention is the pharmaceutical industry, a key player in the health care sector and a major contributor to Irish economic activity, with only two articles. Jimmy Le's contribution examined methods for financing sustainable drug development for neglected diseases (Le, 2014), while Paul Gorecki examined the cost savings that could be realised from medicine pricing agreements between the pharmaceutical industry and the State (Gorecki, 2018). Only two articles have dealt explicitly with issues relating to mental health, the aforementioned Walsh and Walsh (2011) paper on suicide, as well as Arthur Williamson's examination of the background and development of State care for the mentally ill in Ireland (Williamson, 1970). In addition, there has only been one article concerned with the evaluation of a health programme or intervention (Murray *et al*., 1995), and surprisingly little focus on health care resource allocation. A notable exception is O'Shea *et al*. (2001), who used willingness-to-pay as a discriminatory tool for priority setting across three different health care programmes, namely cancer, cardiovascular and community care.

Of course, just because there is a number of important health-related topics and/or themes that have received little attention to date in the *ESR* does not mean these were not the focus of Irish-based researchers – there are many other outlets in which such work has been published. Nonetheless, health-related research in the *ESR* over the years has tended to mirror both research in international journals and domestic policy debates and, in that regard, it is perhaps noteworthy that there is relatively little published on topics such as mental health, private health insurance, waiting times, health care expenditure, financing and sustainability, programme evaluation, physical determinants of health (e.g. natural and built environments), amongst others.

VI CONCLUDING REMARKS

Overall the *ESR* has made a significant contribution to the dissemination of high quality, impactful and policy-relevant health research over its fifty years. While most contributors were Irish-based scholars, contributions from well-known international academics also feature (e.g. Propper, 1994; Janssen *et al*., 1994). Roughly two-thirds of all health authors over the past fifty years were male, though the gender mix has shifted markedly, with roughly equal numbers of male and female contributors in the past decade. Single author articles were much more common in the early years of the journal but, in line with international trends, there has been an increase in the number of authors per article. Nonetheless the average remains relatively low, at just over two authors per article in the last ten years.

A notable focus across the identified themes has been on inequalities or disparities in health care utilisation, health outcomes and health behaviours. For example, a number of papers considered socioeconomic disparities in mortality

rates (Nolan, 1990; O'Shea, 2002; Layte and Nolan, 2016); many of the articles on risky heath behaviours focussed on differences by sex and/or social class (Wilson, 1969; Crube, 1984; Madden, 2013; Hudson *et al*., 2015); while much of the analysis of perinatal and child health outcomes also examined social gradients (Nolan and Magee, 1994; Layte and Clyne, 2010; McGovern, 2013; Nolan and Layte, 2014). The enduring sense from this research is that the poorest in society still fare considerably worse on many important measures. Equity in the delivery and finance of health services is a related issue that also features strongly, e.g. Propper's (1994) review of equity in the UK, Janssen *et al*.'s (1994) review of changes to the Dutch system, and Layte and Nolan's (2004) examination of equity in the utilisation of health care in Ireland.

Another notable feature is that articles with a mainly theoretical (Somerville, 1998) or methodological (O'Connor, 1973; Geary, 1973; Thom, 1984; Conniffe, 1995; Pringle, 1996) focus were relatively more common in the earlier years of the journal, while the focus more recently has been on empirical or applied contributions, generally using applied microeconometric methods, and often with a distinct policy relevance. This is not overly surprising, given international trends in health-related research, as well as the now widespread availability of high quality health-related microdata. Mullahy (2019) notes that calls for evidence-based health policy and health care are now ubiquitous, and Irish-based researchers are indeed currently fortunate to have access to resources that help facilitate the production of high quality research.

Of particular note in this regard are the *Growing Up in Ireland* (GUI) and The Irish Longitudinal Study of Ageing (TILDA) longitudinal datasets, which Irish-based researchers have been quick to exploit. For example, it is interesting to note that six of the health articles published in the *ESR* in recent years have used one of those two datasets.[12] Other survey data to be utilised include the Survey on Lifestyle and Attitude to Nutrition (SLÁN) (Doherty *et al*., 2012; Madden, 2013), while Schneider and Devitt (2018) used the European Social Survey (ESS) in their assessment of how foreign-born residents perceive the Irish health system. Administrative and census-based data also feature. For example, Layte and Clyne (2010), Brick and Layte (2011) and Brick and Nolan (2014) all used data from the Irish National Perinatal Reporting System; Keegan and Smith (2013) and Keegan *et al*. (2017) used Hospital In-Patient Enquiry Scheme and Voluntary Health Insurance claims data respectively; while Walsh and Walsh (2011) made use of the Annual Reports of Vital Statistics, and Hanly and Sheerin (2017) examined Census of Population data.

All of this highlights the importance of high quality data in the production of meaningful and reliable evidence-based research. However, Mullahy (2019) cautions that debates around the relative importance of clever identification

[112] Those articles are McGovern (2013); Nolan and Layte (2014); Hudson *et al.* (2015); Gorecki (2018); Connolly *et al.* (2018); and Gillespie *et al.* (2019).

strategies for causal inference (Ruhm, 2019), and ongoing controversies around the cult of statistical significance (Ziliak and McCloskey, 2007), "point to the importance of modesty in the conduct and reporting of our work". This is an important message for all engaged in empirical research, including those publishing health-related research in the *ESR* in the next fifty years.

APPENDIX:

Health-Related Articles in the *ESR*

Year	*Authors*	*Title*
1969	Wilson, K.	A Note on Smoking Among Dublin School Children
1969	O'Riordan, W.K.	Price Elasticity of Demand for Tobacco in Ireland
1970	Williamson, A.	The Beginnings of State Care for the Mentally Ill in Ireland
1970	Walsh, B.M. and D. Walsh	Economic Aspects of Alcohol Consumption in the Republic of Ireland
1973	O'Connor, J.F.	The Measurement of Levels of Drinking
1973	Geary, P.T.	The Demand for Petrol and Tobacco in Ireland: A Comment
1980	Walsh, B.M.	Health Education and the Demand for Tobacco in Ireland, 1953-76: A Note
1983	Tussing, A.D.	Physician-Induced Demand for Medical Care: Irish General Practitioners
1984	Thom, D.R.	The Demand for Alcohol in Ireland
1984	Crube, J.W., S. McGree and M. Morgan	Smoking Behaviours, Intentions and Beliefs Among Dublin Primary School Children
1989	O'Shea, E. and R. Corcoran	The Placement of Elderly Persons: A Logit Estimation and Cost Analysis
1990	Nolan, B.	Socio-economic Mortality Differentials in Ireland
1994	Propper, C.	Equity and the UK National Health Service: A Review of the Evidence
1994	Janssen, R., E. Van Doorslaer and A. Wagstaff	Health Insurance Reform in The Netherlands: Assessing The Progressivity Consequences
1994	Nolan, B. and H. Magee	Perinatal Mortality and Low Birthweight by Socio-Economic Background: Evidence for Ireland
1995	Phillips, C. and S. Neill	Referrals to the Hospice Service in Ireland
1995	Murray, P., E. Shelley, L. Daly, C. Collins, R. Conroy and I. Graham	Target Audience Penetration by a Healthy Lifestyle Promotion Programme: Results From The Kilkenny Health Project
1995	Conniffe, D.	Models of Irish Tobacco Consumption
1996	Pringle, D.G.	Mapping Disease Risk Estimates Based on Small Numbers: An Assessment of Empirical Bayes Techniques
1997	O'Shea, E. and P. Murray	Care Provision and Dependency in Long-Stay Institutions
1998	Somerville, R.A.	Medical Insurance, Community Rating, and Adverse Selection: An Overlapping Generations Perspective
1999	McKillop, D.G., J.C. Glass, C.A. Kerr and G. McCallion	Efficiency in Northern Ireland Hospitals: A Non-parametric Analysis
2001	O'Shea E., J. Stewart, C. Donaldson and P. Shackley	Eliciting Preferences for Resource Allocation in Health Care
2002	O'Shea, E.	Measuring Trends in Male Mortality by Socio-Economic Group in Ireland: A Note on the Quality of the Data
2004	Layte, R. and B. Nolan	Equity in the Utilisation of Health Care in Ireland

Health-Related Articles in the *ESR* (Contd.)

Year	*Authors*	*Title*
2005	Gannon, B.	Testing for Variation in Technical Efficiency of Hospitals in Ireland
2006	McGregor, P., P. McKee and C. O'Neill	GP Utilisation in Northern Ireland: Exploiting the Gatekeeper Function
2007	Madden, D.	Doctors' Fees in Ireland Following the Change in Reimbursement: Did They Jump?
2007	Layte, R.	Equity in the Utilisation of Hospital Inpatient Services in Ireland? An Improved Approach to the Measurement of Health Need
2010	Layte, R. and B. Clyne	Did the Celtic Tiger Decrease Socio-Economic Differentials in Perinatal Mortality in Ireland?
2011	Boate, C.	Competition in Primary Healthcare in Ireland: More and Better Services for Less Money
2011	Brick, A. and R. Layte	Exploring Trends in the Rate of Caesarean Section in Ireland 1999-2007
2011	Trépel, D.	Informal Cost of Dementia Care – A Proxy-Good Valuation in Ireland
2011	Walsh, B. and D. Walsh	Suicide in Ireland: The Influence of Alcohol and Unemployment
2012	Kennedy, P.	Change in Maternity Provision in Ireland: "Elephants on the Move"
2012	Brick, A., A. Nolan, J. O'Reilly and S. Smith	Conflicting Financial Incentives in the Irish Health-Care System
2012	Doherty, E., A. Dee and C. O'Neill	Estimating the Amount of Overweight and Obesity Related Health-Care Use in the Republic of Ireland Using SLÁN Data
2013	Keegan, C. and S. Smith	The Length of Stay of In-Patient Stroke Discharges in Irish Acute Hospitals
2013	Madden, D.	The Socio-Economic Gradient of Obesity in Ireland
2013	McGovern, M.E.	Still Unequal at Birth: Birth Weight, Socio-economic Status and Outcomes at Age 9
2014	Le, J.	Financing Sustainable Drug Development for Neglected Diseases: A Case of Push-Pull Mechanisms and Global Public Goods
2014	Brick, A. and A. Nolan	Maternal Country of Birth Differences in Breastfeeding at Hospital Discharge in Ireland
2014	Nolan, A. and R. Layte	Socio-economic Inequalities in Child Health in Ireland
2015	Hudson, E., D. Madden and I. Mosca	A Formal Investigation of Inequalities in Health Behaviours After Age 50 on the Island of Ireland
2016	Layte, R. and A. Nolan	Socio-economic Differentials in Male Mortality in Ireland 1984-2008
2017	Keegan, C., C. Teljeur, B. Turner and S. Thomas	Addressing Market Segmentation and Incentives for Risk Selection: How Well Does Risk Equalisation in the Irish Private Health Insurance Market Work?
2017	Hanly P. and C. Sheerin	Valuing Informal Care in Ireland: Beyond the Traditional Production Boundary

Health-Related Articles in the *ESR* (Contd.)

Year	*Authors*	*Title*
2018	Schneider, S.M. and C. Devitt	How do the Foreign-Born Rate Host Country Health Systems? Evidence from Ireland
2018	Gorecki, P.K.	State/Industry Medicine Pricing Agreements, Cost Savings and Counterfactuals: the Case of Ireland
2018	Gorecki, P.K.	The Impact of Free GP Care on GP Utilisation in Ireland
2018	Connolly, S., A. Nolan, B. Walsh and M-A. Wren	Universal GP Care in Ireland: Potential Cost Implications
2019	Gillespie, P., S. Walsh, J. Cullinan and D. Devane	An Analysis of Antenatal Care Pathways to Mode of Birth in Ireland

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