Minutes Thursday 27 April 2023 Newport Boardroom Hybrid Meeting

Present

UK Statistics Authority

Sir Robert Chote (Chair) Sian Jones (Deputy Chair) Dr Jacob Abboud Professor Sir John Aston Sam Beckett Professor Sir Ian Diamond Richard Dobbs Ed Humpherson Nora Nanayakkara Professor Dame Carol Propper Professor Sir David Spiegelhalter Penny Young

Also in attendance

Owen Brace Robert Bumpstead Dr Janet Egdell (for item 9) Sally-Ann Jones (Secretariat) Vahe Nafilyan (for item 8) Alison Pritchard Emma Rourke (for items 8 and 10) Ruth Studley (for item 8) Tom Taylor Jennet Woolford (for item 10) Jon Wroth-Smith (for item 9) Jason Yaxley (for item 11)

Apologies

None

1. Apologies

1.1 There were no apologies received.

2. Declarations of Interest

2.1 There were no new declarations of interest.

3. Minutes and matters arising from previous meetings

3.1 The minutes of the previous meeting held on 30 March 2023 were agreed.

4. Report from the Authority Chair

- 4.1 Non-Executive Directors (NEDs) had met prior to the Board meeting. They had discussed progress of work towards the census consultation.
- 4.2 The Chair reported on his recent activities since the Board last met. As part of the NED programme of activities a follow up session had been held on the post census 2023 recommendation, ahead of a substantive discussion at May Board. It was noted the Methodological Assurance Review Panel, chaired by Sir Bernard Silverman, had been engaged throughout to provide independent assurance.
- 4.3 Sir Robert had written to Rachel Reeves MP, Shadow Chancellor of the Exchequer, regarding the use of a misleading graphic on Gross Domestic Product growth rates forecast.
- 4.4 With regard to the ONS Whistleblowing Policy and Speaking up Framework the Board heard that the Audit and Risk Assurance Committee had received an update on these policies in January 2023, and overall had been assured on the effectiveness of processes in place.
- 4.5 Sir Robert informed the meeting that Penny Young had taken on the role of Chair of Regulation Committee.
- 4.6 The Board heard that the Institute for Government had published a report, *The Treasury during Covid*, which referenced the Office for National Statistics (ONS) as a centre of expertise that performed well during the pandemic.

5. Report from the Chief Executive [SA(23)24]

- 5.1 Professor Sir Ian Diamond provided the Board with an overview of activity and issues since the last meeting, highlighting the following:
 - i. Mike Keoghan, Deputy National Statistician for Economic Social and Environment Statistics, and Grant Fitzner, ONS Chief Economist, had given evidence to the Lords Economic Affairs Committee on international comparisons of public sector output within Gross Domestic Product estimates and the UK's productivity performance;
 - ii. progress of business planning with the final ONS business plan scheduled for discussion at May Board;
 - iii. ongoing discussions with the UK Health Security Agency (UKHSA) regarding funding of a future population health monitoring survey;
 - iv. the launch of a pilot into the potential use for the organisation of large language models such as ChatGPT, including consideration of ethical issues; and
 - v. work on migration statistics with the next publication of long term international migration estimates scheduled in May 2023.
- 5.2 The Board heard that the recruitment process for a substantive Deputy National Statistician for Health, Population and Methods was near completion.

6. Report from the Director General for Regulation [SA(23)25]

6.1 Ed Humpherson provided an update on regulation activity, highlighting the areas of casework including NHS doctors numbers, the teacher pay offer and the gender identity question in the England and Wales Census 2021.

6.2 The OSR's business plan had been updated following comments by both the Board and Regulation Committee. The Board approved the business plan, which was scheduled for publication in May.

7. Report from the Chair of the Regulation Committee

- 7.1 The Chair reported on the work of the Regulation Committee which had last met on 20 April.
- 7.2 The Committee had considered:
 - i. the independent report by Professor Patrick Sturgis, which had endorsed OSR's assessment of the COVID-19 Infection Survey;
 - ii. emerging findings of the assessment of ONS Producer Price Inflation statistics;
 - iii. plans for delivery of the State of the Statistical System 2022/23 annual report;
 - iv. the Data Sharing and Linkage draft report and plans for stakeholder engagement;
 - v. progress of the National Statistics Designation review and initial consideration of proposed badge designs; and
 - vi. OSR's role in developing their current guidance for statistical producers setting out the issues around data collection in relation to sex, gender and gender identity.
- 7.3 The Committee had approved OSR's business plan and regulatory programme of work 2023/24.

8. ONS Analytical work for health policy and NHS - Presentation [SA(23)26]

- 8.1 Vahe Nafilyan and Ruth Studley introduced a paper which showcased the health analysis the ONS has been undertaking with colleagues in the NHS or using NHS data.
- 8.2 The Board heard the Public Health Data Asset (PHDA) had been used throughout the pandemic to produce various analysis, and had been developed to include Census 2021 data. Health continued to be a priority analytical area with ONS collaborating across the health system to produce insights into the challenging issues facing health and care delivery.
- 8.3 The Board noted their thanks for an excellent presentation.

9. Scotland Census 2022 [SA(23)27]

- 9.1 Dr Janet Egdell and Jon Wroth-Smith introduced a paper which provided an update on delivery of statistics from Scotland's Census 2022 with particular focus on publication of first outputs planned in Autumn 2023.
- 9.2 The return rate for Scotland's Census 2022 was 89.2 per cent, with 30 of 32 local authorities in Scotland above the target return rate of 85 per cent. In May 2022 National Records of Scotland (NRS) had established an International Steering Group (ISG) chaired by Professor James Brown from the University of Technology, Sydney, and membership, including amongst others Sir Ian, to provide external assurance and expert advice.
- 9.3 The Board heard that the first results of the 2022 census were planned for publication in Autumn 2023 using an innovative revised methodology, which had been developed in partnership with the ISG. The NRS would continue to focus on stakeholder engagement to ensure users have confidence in the quality of the outputs.
- 9.4 Board members welcomed the update.

10. Gender Identity [SA(23)28]

10.1 Jennet Woolford introduced a paper which set out questions raised about the Census 2021 gender identity question and estimates, ONS' response so far, and plans for further research.

- 10.2 The Board heard that the question on gender identity had been tested thoroughly. Following publication of the gender identity Census data in January 2023 a small number of articles had been published relating to sex and gender identity. ONS had subsequently published a statement on the website summarising the testing and consultation that had informed the question design and plans for further research, which would be published in the coming months.
- 10.3 Board members discussed the issue, welcomed the plans for further research in this area, and supported the approach by ONS more generally to publishing data in good time.

11. Integrated Data Service [SA(23)29]

- 11.1 Alison Pritchard and Jason Yaxley presented a paper which provided an update on the progress of the Integrated Data Programme (IDP), responsible for the delivery of the Integrated Data Service (IDS).
- 11.2 The Board heard that the IDS was on track for delivery against the overall plan with the exception of Digital Economy Act (DEA) accreditation, which was ongoing. Areas of focus for the programme going forwards included engagement across government to secure buy-in, DEA accreditation and development of Key Performance Indicators to include the number of active users to assess the growth of the service over time.

12. Any Other Business

12.1 The next meeting would take place on 25 May.

Agenda

27 April 2023, 10.30-14.00 Newport Boardroom Hybrid Meeting

Chair:Sir Robert ChoteApologies:NoneAttendees:Dr Janet Egdell (for item 7), Vahe Nafilyan (for item 6), Emma Rourke (for
items 6 and 8), Ruth Studley (for item 6), Jennet Woolford (for item 8), Jon
Wroth-Smith (for item 7) and Jason Yaxley (for item 9).

NED Session: 10.30-11.00

1 11.00-11.05 5 mins	Minutes and matters arising from previous meetings Declarations of interest	Meeting of 30 March 2023
2	Report from the Authority Chair	Oral update
11.05-11.15 10 mins		Sir Robert Chote
3	Report from the Chief Executive	SA(23)24
11.15-11.50 35 mins		Prof. Sir Ian Diamond
4	Report from the Director-General for Regulation	SA(23)25
11.50-12.05 15 mins		Ed Humpherson
5	Report from Committee Chairs	Oral update
12.05-12.10 5 mins	Regulation Committee	Sir Robert Chote
6	ONS analytical work for health policy and NHS	SA(23)26
12.10-12.35 25 mins	Presentation	Vahe Nafilyan Emma Rourke Ruth Studley
12.35-12.45 10 mins	Lunch	
7	Scotland Census 2022	SA(23)27
12.45-13.05 20 mins		Dr Janet Egdell Jon Wroth-Smith
8	Gender Identity	SA(23)28
13.05-13.30 25 mins		Emma Rourke Jennet Woolford
9	Integrated Data Service	SA(23)29
13.30-13.50 20 mins		Alison Pritchard Jason Yaxley
10 13.50-14.00 10 mins	Any Other Business	

Next meeting: 25 May 2023, Remote Teams Meeting

Chief Executive's Report, April 2023

Purpose

1. This provides the Authority Board with an overview of activity for April 2023.

Summary

2. April has seen a focus on financial planning to ensure that the organisation continues throughout the new financial year on a sure footing. Important progress also continues in discussions on the future of the population and migration statistics system along with health monitoring and the Integrated Data Service (IDS). During the month, I was able to have introductory calls with colleagues across Whitehall in light of recent machinery of government changes as well as welcome the Chancellor of the Duchy of Lancaster to our Newport office.

Efficiencies and financial update

3. Office for National Statistics (ONS) business planning is reaching a conclusion, with a new Accountability Framework in draft that focuses activity on the ONS prioritisation framework. The final version of the ONS Strategic Business Plan will be considered during May Authority Board, including the updated milestones. Further work is required (during April) to ensure the plan is affordable which may involve stopping, pausing, or reducing work outside of the top priorities.

Review of recent activities

- 4. This month has seen the climax of the campaign to recruit a substantive **Deputy National Statistician for Health, Population and Methods** with outcomes to be announced shortly.
- 5. The Deputy National Statistician for Economic, Social and Environment Statistics and ONS's chief economist both gave evidence in Parliament on 18 April to the Lords Economic Affairs Committee. This focused on international comparisons of public sector output within Gross Domestic Product estimates and the UK's productivity performance. I will be providing a keynote speech to select committee staff immediately after the Board to highlight the importance of using analysis and statistics to help improve scrutiny within Parliament.
- 6. ONS experts attended the recent three-day **United Nations meeting for the Group of Experts on National Accounts**, 25-27 April, in Geneva. ONS presented three papers on: *the impact of migration on the National Accounts*; *the use of real-time indicators*; and *the impact of high inflation*.
- 31 March marked the pause of the COVID-19 Infection Survey (CIS) which resulted in over two million completed questionnaires, and 2.9 million samples returned to the labs since the transition to CIS-Digital from 1 August 2022. This is a great achievement by all involved in ONS, Oxford University and IQVIA working in partnership with the UK Health Surveillance Agency (UKHSA).
- 8. To ensure CIS participants remain engaged and some continuity of data on the occurrence and impacts of respiratory infections, such as Long Covid, a **separate social survey** is being administered by ONS. The pilot for this study went live to 2,000 participants on 11 April and it is hoped that this will ramp up to all 300,000 CIS participants by the end of April.
- 9. April 3 marked the official start of our Wellcome Trust funded **Pandemic Preparedness Toolkit** project. Over the next five years we will work with international partners from lower, middle and higher income countries to develop a toolkit that will assist National

Statistics Institutes to work with Health Agencies to set up and run effective health surveillance programmes and ensure they have impact with policy makers and wider stakeholders. The project will build on the work conducted and lessons learnt throughout the CIS, ensuring that it leaves a long-term legacy, but supports countries to develop their own surveillance systems fit for their needs rather than simply trying to export the CIS.

- 10. Positive discussions continue with UKHSA regarding the funding of a future **Population Health Monitoring** survey. If funded, ONS will host the sampling and data collection platform (already in development) that manages communications with participants, collects questionnaire data and links to laboratories to receive bio sampling results. This survey will be conducted in partnership with a new Chief Investigator who UKHSA are currently sourcing. It is hoped this survey will provide a platform to collect data on a range of respiratory infections (e.g. Flu and Respiratory Syncytial Virus) and will have the potential to collect information on wider health conditions (e.g. mental health).
- 11. On **excess deaths**, constructive discussions with partner organisations continue and there is a strong sense of collaboration for the work. A paper is being submitted to the Methodological Assurance Review Panel which provides early information on the work taking place on excess deaths and will invite views on the approach. This complex analysis will be developed collaboratively over the next few months, and we aim to publish this in September 2023.
- 12. We have **completed our series of ONS Local roundtables in England** that are developing the first iteration of our service offer for local users.
- 13. This month saw the launch of a pilot into how the organisation can make the safest and best use of **ChatGPT** and similar artificial intelligence. A small number of staff have enrolled on the pilot with findings expected in the summer.
- 14. Later this month, ONS and the Geospatial Commission are holding a **joint symposium on the use of Earth Observation and Satellite Data for the public good** and official statistics for senior civil servants and ministers. There are short talks covering innovative applications of satellite data for replacing elements of a national census, and for predicting economic growth in developed countries.
- 15. As part of the wider transformation plans for the ONS Crime Statistics, 24 April saw the publication of our first report on investigations into how to better incorporate data on **crimes against the non-household population**. The first look is on care home residents. We focussed on what sources of data are currently available and whether the Crime Survey for England and Wales could be extended to care home settings.
- 16. Working with the Department for Levelling Up, Housing and Communities and Home Office, we have published our latest survey of our Ukrainian Humanitarian Survey, focusing on barriers to work, professions, the private rented sector and independent living. This provides data to Ministers with portfolio for English Language classes, Jobs and Careers support and access to housing and childcare.
- 17. As planned, the IDS entered **Public Beta Service** on 29 March. The Public Beta releases include functional technical solutions which are all part of the Safe Outputs capability and are now available for use by IDS users. This means that IDS welcomes even more datasets on to a secure platform, with the ability to migrate additional users, and an impressive linkage capability to capitalise on the richness of insight that is available. This milestone will be an opportunity to invite interested stakeholders to explore and familiarise themselves with the IDS platform.
- 18. As part of the move to this next phase of the programme eight major datasets, including Labour Force Survey, were engineered and migrated onto **IDS**, and other data work has progressed to support Digital Economy Act (DEA) accreditation such as the meta-data

solution, the data governance gates and processes relating to the acquisition of data. The programme continues to review and refine its submission for DEA accreditation with the hope of concluding this over the coming weeks.

Professor Sir Ian Diamond, National Statistician, April 2023

Update from the Director General for Regulation

Purpose

1. This paper provides the UK Statistics Authority Board (the Board) with an overview of Office for Statistics Regulation (OSR) activities. This paper is shorter this month as there is no time between the Regulation Committee (RC) and the Board meeting to report back on discussions or work on actions taken at that meeting.

Discussion

- 2. Our main areas of focus since the last Board meeting have been:
 - i. Rob Kent Smith: Started with OSR as my Deputy Director last week. He will be responsible for strategy, capability and securing appropriate impact from OSR's regulatory work.
 - ii. Post Eurostat Scrutiny of Economic Statistics: OSR's first quality-focused pilot assessment (of Office for National Statistics (ONS) Producer Price Inflation Statistics) is progressing well. This pilot assessment is using a Quality Assessment (QA) Framework that OSR is developing based on the Code of Practice and elements from international statistical QA frameworks. As part of the project, OSR is engaging with a range of key stakeholders, and other National Statistical Institutes for their expertise. We discussed emerging findings with Regulation Committee on 20 April, with a view to finalising the report and publishing in June. We are now considering the subject of our second assessment and will be reviewing the pilot assessment.
 - iii. Data linkage: The OSR has conducted a review into the barriers and enablers to data sharing and linking across the public sector. Our report looks at the current situation, our recommendations for improvement and hopes for the future and is now at draft stage. On 20 April the report is being taken to our Regulation Committee for comment, before being sent externally (still in draft) to several key stakeholders. The anticipated publication date of the report is week commencing 12 June.
 - iv. Business plan: The Regulation Committee reviewed the OSR business plan and we now seek Board approval to publish.

Casework

- 3. We have started the casework year strong with 37 cases at the time of writing. These cases raised concerns with autism referrals, Foreign National Offenders, NHS doctors numbers, the census sex and gender question and the teacher pay offer.
- 4. Casework concerns are now more regularly focusing on topical issues that have received media attention. There is high media and public interest in Sex and Gender. This focus has turned this month to concerns about the Census for England and Wales question on gender identity. As a result of the casework we have received and the concerns we have we will be initiating a review, and we plan to write to ONS to outline what we will review.
- 5. We are also dealing with a case regarding pension calculations used in the Wealth and Assets survey raised by the Institute for Fiscal Studies.
- 6. In terms of cases closed since the last meeting, I wrote to Pam Duncan Glancy MSP in response to her concerns with the Scottish Government cost of living figures. I also wrote to Mark Svenson and Chris Roebuck regarding a recent NHS England news release.

Wider reach

7. My colleague, Mary, attended the <u>PERITIA 'rethinking Policy, Expertise, and Trust'</u> <u>conference</u> giving a talk on protecting and building public confidence in statistics and evidence. The audience was highly engaged and feedback was very positive. We also received some interesting questions about our work. Our Head of Casework took part in a panel for the "Text Data for the Public Good" event run by the cross-government and public sector data science community. She discussed who we are and what we do.

Issues on my mind

- 8. With the results of the people survey there are some significant areas of focus for my senior leadership team and me this year. In particular, we plan to focus on individual learning and development, line manager support and our feedback culture.
- 9. In order to ensure a more joined up approach to our projects we have initiated cross cutting programme boards. As part of our efforts on recruitment it will be important to ensure that these boards are fully resourced to make sure that they are effective.

Ed Humpherson, Director General for Regulation, Office for Statistics Regulation, 19 April 2023

Regulatory Activities Dashboard

April 2023

Regulatory Activities Dusinoutra	April 2020	
Population and Society	Economy, Business and Trade	
Statement: Considering making a statement on Ministers use of Home Office statistics. Casework: Several cases regarding ministerial use of Home Office migrations statistics – looking to publish a statement early April. Live cases on NRS, ONS registered deaths reporting, Covid vaccines and gender identity census data. Welsh Government Watching brief on Welsh language stats and ONS/WG electoral roll statistics Assessments: Scotland Census report due for publication early April Census in England and Wales Letter, linked to Scotland census assessment, to ONS regarding UK census data due for publication early April. Compliance Checks: ONS mortality statistics publication in final internal sign off stages before publication. Measuring the population, Ongoing engagement with ONS teams ahead of its consultation which will feed into 2023 recommendation on the future of census. Systemic Review: Migration transformation ONS published a response to our recommendations from February's report. Developing our response.	External Scrutiny of UK Economic Statistics (ESE stats) Programme – Developing the quality framework and programme plans. Assessment: Producer Price Inflation statistics pilot assessment as part of ESE stats programme update on the agenda for April Regulation Committee UK Trade, Annual Business Survey, Purchases Survey and Business Demography continuing follow up with ONS. Casework: Published letter to HMT on inflation infographic following numerous complaints. Scottish Cost of Living Budget - draft letter with Sir Robert for review. Compliance checks: International Comparisons of Productivity –review compliance with guidance on communicating uncertainty. Systemic Review: Futureproofing the UK Standard Industrial Classification continuing engagement.	
nonn reordary a report. Developing our response.	Crime and Security	
Children, Education and Skills Assessment: Started assessment of Scottish Government Achievement of Curriculum for Excellence Levels statistics Casework: Sent a private letter to DfE regarding figures on teacher pay quoted by SoS Gillian Keegan. Investigating concerns raised around the Annual Pupil Census and Health and Wellbeing	Assessments: Scottish prison population statistics evidence of meeting requirements to April Regulation Committee Casework: Investigating concerns about the Mayor's Office for Policing and Crime's (MOPAC) Teachers Toolkit on gender-based violence. Investigated Ministry of Justice Reoffending Statistics, raising informally with MOJ. Compliance checks/Rapid Reviews: Published letters for ONS modern slavery in the UK statistics and Home Office National Referral Mechanism statistics. Shared findings of review of Redevelopment of Domestic Abuse guestions for the Crime	
Census in Scotland. Compliance Checks: Published letter for Welsh Government School Workforce Annual Census	Survey for England and Wales with ONS Health and Social Care	
Transport, Environment and Climate Change		
Assessments: People and Nature Survey (PaNS). Continuing engagement in line with NE action plan. Assessment underway of Defra's butterfly statistics. Casework: Response to Salmon Stocks statistics published late March. Further cases have been received on TFL's use of statistics. Compliance Checks: Home Office's Annual Statistics of Scientific Procedures on Living Animals published end of March. Defra's wild bird statistics underway. Systemic Reviews: Follow up on recommendations from the review of Transport Accessibility Statistics underway.	Assessment: Re-assessment underway for the Office for Health Improvement and Disparities (OHID) Adult Oral Health Survey statistics and assessment underway of Scottish A&E waiting times statistics. Casework: Investigating concerns about comparability of A&E waiting times across the UK. Compliance Checks/Rapid Reviews: ONS Health Index and substance misuse statistics in England published. Systemic Reviews: Continuing user engagement, following up on Mental Health reviews.	
Labour Market and Welfare	Housing, Planning and Local Services	
Assessments: Statistics on Employment and Earnings from Pay As You Earn Real Time Information (PAYE RTI) drafting assessment report, for April Regulation Committee. Compliance checks: ONS transformation of the Labour Force Survey (Phase 2) continues. ONS has extended its timetable by six months. Planning next letter detailing our view and progress against recommendations in May. Engaging with NISRA following decision to delay decommission of current LFS and develop own survey. Systemic Reviews: Income-based poverty statistics, c ontinuing engagement on recommendations.	Engaging with ONS, DLUHC and LUHC committee on Sub-national data developments, to support public understanding of levelling up Assessments: Statutory Homelessness in England statistics : Continuing engagement in line with DLUHC action plan Casework: Investigating concerns raised about the quality of VOA's property attribute and council tax banding data Compliance Checks/Rapid Reviews: Follow-up meeting on DfC's NI Homelessness statistics , WG's Estimates of Housing Need and Homelessness accommodation provision and rough sleeping Management Information.	

Regulatory Activities Dashboard

April 2023

Data and Methods

Internal work: Our new SEO data scientist started in March so we will be re-launching our data science programme. We may also have an opportunity for an MSc student to work on a project with us, recruited through the ONS Research & Innovation Office.

Review of <u>data sharing/linkage</u>, we are now at the draft stage of the report and plan to publishing in early summer 2023 **Data Science:** Our new data scientist started in March so we will be re-launching our data science programme.

External activities: We are working with Full Fact on a journal article for the International Association for Official Statistics (June edition), on the role of AI Tools in combatting misuse of statistics. We have had an abstract accepted for the United Nations Economic Commission for Europe (UNECE) conference on Machine Learning in Official Statistics, in June

Policy & Standards

Designation refresh: We discussed our recommendations for future messaging related to designation at the March Authority Board. We will discuss options for new badges for official statistics at the Regulation Committee meeting. Our regulatory team is refreshing our assessment approach, conducting pilot assessments and developing guidance.

Voluntary application and wider reach: We added a private data company, Fable Data, to our published list of voluntary adopters. We continue to provide advice to analysts looking to adopt the Code pillars for their non-OS outputs. We held an appreciative inquiry session with a group of key adopters to help us plan a project to develop VA further in 2023/24.

Insight

Research

Research Programme: We are developing an initial definition of the 'public good of government statistics', which we will discuss with the Committee in May, before publication. We are continuing to promote our work, such as through organising a seminar for government analysts on the public good, presenting at a European PERITIA conference on 'rethinking policy, expertise and trust', and writing an article for Significance magazine.

Intelligent transparency (IT): We held a round table with DWP, HO, MOJ, MOD to hear about their successes and challenges in following IT principles. It was a fascinating discussion and has given us lots to take forward, including enhancing our engagement with the comms profession. We'll be refreshing our IT guidance over the next few months.

Insight Committee: We held an Insight Committee in March, where we received helpful input on our plans for the 2022/23 State of the Statistical System report.

Recruitment: We have recruited a new Evaluation and Insight Manager, who we hope will start in April.

Cross Cutting Issues

Sex and Gender: have developed a two-page summary for discussion with the Committee

Communicating statistics: establishing new cross-cutting programme to look at statistical communication, including existing work on uncertainty and statistical literacy

ONS Analysis with and for the NHS

Purpose

1. This paper showcases the health analysis the Office for National Statistics (ONS) have been undertaking with colleagues in the National Health Service (NHS) or using NHS data.

Recommendations

2. Members of the Authority Board are invited to comment on the work by ONS with the NHS.

Discussion

- 3. Health continues to be a priority analytical area in ONS, collaborating across the health system to bring insights into some of the most challenging issues facing health and care delivery.
- 4. Building on ONS's reputation as the provider of the gold standard for COVID-19 surveillance, our position as a trusted and independent provider of quality health data means we are uniquely placed to deliver insight at the intersection of health, population and economic statistics. By bringing together ONS's expertise in analysis, including novel modelling techniques, access to data, and the capability for largescale data-linkage, we can create insight that moves social and economic policy forward, at pace.
- 5. In addition to our routine statistics on mortality and drivers of health inequality, we have invested in a range of bespoke analyses, notably:
 - i. Modelling the impact NHS pressures are having on Deaths within Integrated Care Boards in England. This work uses general and acute bed capacity, adult critical care bed capacity, Accident and Emergency (A&E) waiting times, emergency admissions, COVID-19 prevalence and mortality analysis. Welsh Government are looking to replicate this analysis for NHS Wales. We plan to further expand this aggregatedlevel analysis to use person-level data of all patient visits and patients admitted to all Emergency Departments in England. We will adjust for a range of covariates and confounding factors likely to influence the underlying relationship between waiting time and mortality. These will include age, sex, ethnicity, socio-economic status, long-term health or disability, self-reported general health, and clinical acuity.
 - ii. Analysis on the risk of cardiac death following COVID-19 vaccination in young people has been accepted for publication in Nature Communications. The analysis shows that there is no significant increase in cardiac or all-cause mortality in the 12 weeks following COVID-19 vaccination compared to more than 12 weeks after any dose. However, there is some evidence of an increase in cardiac death in women after a first dose of non Messenger Ribonucleic Acid vaccines.
 - iii. Scoping project ideas for analysis on the interplay between health and labour market status, including work relating to NHS waiting list, using linked Census, NHS, Department for Work and Pensions (DWP) and HM Revenue and Customs data. This work is being funded for the next two years via the Shared Outcomes Fund.
 - iv. Working with Health Data Research UK on a project looking at identifying groups at high risk of hospitalisations and death during the Winter. This work utilised linked individual level clinical records with 2021 Census data and focuses on the interplay between poverty and clinical vulnerabilities.
 - v. Undertaking various work on NHS Pressures resulting from strikes. This includes monitoring published Situational Report data produced by NHS and summarising trends to offer insights for decision makers. This includes information on health industrial action to identify trends in the data when strike action takes place.

- vi. Published analysis on Trends in patient-to-staff numbers in GP practices in England. This work uses NHS digital data on patient registrations at GP practices, and GP workforce data to provide insights on the numbers of patients per GP (both trainee and fully qualified) in October 2022. Numbers are also compared to 2018 values and breakdowns are provided showing fewer patients per doctor in GP practices that serve areas with lower levels of income deprivation.
- vii. Continued to develop the Public Health Data Asset (PHDA), a unique data source combining electronic patient records with ONS Census and mortality data. It originally combined the 2011 Census with primary care records, hospitalisation data, vaccination records and data from the test and trace system. More recently, we have linked in DWP benefits data and created a second version based on the 2021 Census, with Census 2021 linked to mortality and some of the health data being available for analysis by early 2023. Throughout the pandemic the PHDA has been used to produce various analysis including COVID risk modelling, inequalities, mortality, and vaccine uptake. The PHDA will also be used to inform health policy and improve patient outcomes beyond the COVID-19 pandemic.
- viii. Working with the Department of Health and Social Care (DHSC) and utilising the PHDA to produce an estimate of the number of people at risk of adverse health outcomes. The analysis identifies patients with relevant health conditions and whether they are likely to live in poverty in order to inform and better target policy for those most vulnerable in society.
- ix. Working with NHS England (previously NHS Digital) on the Mental Health of Children and Young People Survey. This survey is funded by the Department of Health and Social Care and the Department for Education, commissioned by NHS England, and carried out by ONS, the National Centre for Social Research, University of Cambridge, and University of Exeter. The survey has been completed annually online since 2020 to monitor the impact of COVID-19 on the mental health of children and young people. We are currently working on wave four of the survey which went live on 20 February with the publication due to be published Autumn 2023 on the NHS England website.
- x. Working with DHSC and utilising the PHDA to produce new insights into dementia. Starting with analyse into the risk of death by dementia during the COVID pandemic followed by analysis into health inequalities and dementia.
- xi. Using the linked data in the PHDA to investigate the relationship around people who provide unpaid care and their health and mortality.
- xii. Published analysis showing both the qualitative and quantitative bias in how ethnicity is recorded in a number of health data sources, including Hospital Episodes Statistics, General Practice Extraction Service Data compared to Census.
- xiii. Using the linked PHDA to undertake risk analyses investigating the effect of the coronavirus pandemic on hospital admissions associated with new-onset disability and frailty.
- 6. Ongoing access to NHS data and the ability to link NHS data to other records such as Census 2021 is fundamental to the continued delivery of this health and intersected analysis. We are discussing the opportunities under the current government that will facilitate the speed and access that ONS can secure to that data, on behalf of the system,

Conclusion

7. NHS Data has been, and continues to be, critical to the delivery of key ONS analysis covering priority policy topics for the Government. This work has provided key insights into those who are most vulnerable in society, the impact strikes are having and the health outcomes of the population at this point in time.

Ruth Studley, Health Analysis and Pandemic Insights, Office for National Statistics, 16 April 2023

SA(23)27

Scotland Census 2022 – Look Ahead to First Outputs

Purpose

1. This paper provides an update from National Records of Scotland (NRS) on delivery of statistics from Scotland's Census 2022 with particular focus on publication of first outputs planned in Autumn 2023.

Recommendations

- 2. Members of the Authority Board are invited to note:
 - i. steps taken to ensure census statistics are robust, building on the return rates achieved during the collection period with innovative use of administrative data;
 - ii. delivery confidence in publishing first outputs from Scotland's Census 2022; and
 - iii. NRS priorities ahead of the first release following the recent Office for Statistics Regulation (OSR) assessment of the 2022 census.

Background

- 3. The census is the biggest statistical data collection exercise in Scotland. COVID-19 restrictions delayed NRS's logistical planning, testing of census systems/processes and engagement with key stakeholder organisations. Following an options assessment process, and on the advice of NRS, Scottish Ministers made the decision to delay Scotland's census to 2022.
- 4. The public were asked to complete the census online and 90 per cent of households did so. Digital systems and processes worked well with security providing robust protection against cyber threats. Provision was made for households to respond if they were unable or unwilling to do so online through paper questionnaires or telephone interviews.
- 5. By the end of the planned collection period, while over two million questionnaires had been received, the overall return rate and return rates for local authorities were lower than had been planned for. The census collection period was extended to the end of May 2022 and a final return rate of 89.2 per cent was achieved, with 30 of the 32 local authorities in Scotland above the target return rate of 85 per cent.
- 6. In May 2022, NRS established an International Steering Group (ISG) chaired by Professor James Brown from the University of Technology, Sydney. Its initial task was to provide assurance that the census programme was ready to move on from its collect phase, which it did in June 2022. It has subsequently been advising NRS on its methodology and how to ensure robust estimates of the population can be produced.
- 7. First results of the 2022 census are planned for publication in Autumn 2023 using an innovative revised methodology developed in partnership with the ISG. Users must have confidence in these statistics and those in subsequent releases. Building on engagement activity already undertaken, NRS are developing plans for how best to explain the steps it is taking to ensure robustness. These plans will factor in the requirements made by OSR in its assessment of the 2022 census.

Discussion

Adapting the Standard Statistical Design

8. Targets set for return rates (94 per cent overall and at least 85 per cent for all Local Authorities) were based on the 'standard statistical design' of the 2022 census where final statistics would be adjusted to represent the whole population rather than just who completed a return.

- 9. The standard statistical design is broadly equivalent to the approach taken in the 2001 and 2011 census in Scotland. This involved estimating and adjusting for under and over coverage using the Census Coverage Survey (CCS) which was carried out immediately after the census collection period. Return rates for the CCS in Scotland were equivalent to those in England and Wales (60 per cent).
- 10. Census records are linked to CCS records to determine who had responded to both and who had responded to one but not the other. A statistical process called Dual System Estimation is then used to estimate both under and over coverage. Published statistics include adjustments for these estimates.
- 11. Coverage adjusted statistics can still be produced without making changes to the standard statistical design. Any estimate will have a level of uncertainty i.e. by estimating and not counting, it is expected that there will be some level of inaccuracy. Target return rates were defined to produce estimates of a level of uncertainty that makes them fit for purpose.
- 12. In recognition of the lower-than-expected return rates, NRS established the ISG. The group's role in Scotland's Census 2022 has been to:
 - i. provide assurance that the census programme was ready to move on from the collect phase (which it did in June 2022);
 - ii. provide direction and support to NRS as it implements its statistical design through the processing and estimation phases; and
 - iii. propose amendments or changes to consider, including accessing additional administrative data.
- 13. The ISG is made up of census experts within the UK including Professor Sir Ian Diamond and Professor David Martin plus Professor Andrew Morris from Health Data Research UK, as well as international experts Professor James Brown (chair), Roeland Beerten from Statistics Flanders and Abby Morgan from Statistics New Zealand.
- 14. Practical experience from New Zealand has been particularly useful given similar challenges were faced in their 2018 census which achieved a response rate of 83 per cent. In response, administrative data were used to supplement census responses in the published statistics.
- 15. Work to adapt the standard statistical design has progressed well with ISG providing invaluable support and guidance. As in New Zealand, NRS will be using administrative data to supplement collected data. NRS have gained access to all administrative data judged 'essential' by ISG.
- 16. NRS have been able to benefit from its previous experience in working with administrative data. Linkage methodology and sources used to develop experimental Administrative Data Based Population Estimates has been heavily re-used in adapting the standard statistical design.
- 17. Unlike in New Zealand, the approach being taken by NRS is to supplement the CCS with administrative data rather than supplement the census itself. The decision to take this approach was evidenced through simulation studies and was endorsed by the ISG.
- 18. Meetings with the ISG have been held weekly during what has been an intensive period of research. Notes from each meeting are routinely published on the NRS website. A fuller description of the adaptations made will be published in the coming months ahead of the first release.
- 19. An enormous amount of learning has come from the work undertaken to adapt the design. The ground-breaking approach developed will provide an excellent springboard in terms of data, methodology and capability as NRS develops plans for the future of the census.

20. There is also considerable international interest in the approach developed. As active participants in the International Census Forum, NRS will present its experience to colleagues from Canada, USA, Ireland, New Zealand and Australia at the annual conference in October 2023. This will cover the methodology, governance and communication of the adaptations made.

Delivering First Estimates

- 21. NRS are confident in delivering first outputs in Autumn 2023, though we recognise that the timetable is challenging. A series of processing stages are being run to code, clean, complete and cross-validate the statistics.
- 22. Detailed planning is in place for each step of processing with a series of statistical quality gates in place at key stages to inform delivery confidence and robustness.
- 23. Adapting the 'standard statistical design' in the way proposed is genuinely groundbreaking and has been developed using a strong evidence base. A comprehensive quality assurance (or cross-validation) stage will give NRS and users confidence once the adapted methodology has been applied.
- 24. Census estimates will be validated again using a range of other statistics and data such as the mid-year population estimates. As for the 2022 census, local authorities in Scotland will have the opportunity to feed into the quality assurance process prior to publication with limited pre-release access to aggregate estimates.
- 25. In recognition of the design changes and the challenging timetable, NRS recognises that it must do more to be prepared for any unexpected outcomes from the coverage estimation stage where administrative data is being used.
- 26. Experience from the 2021 Census in both England & Wales and Northern Ireland demonstrated that refinements were needed as a result of quality assurance. NRS are working closely with ONS and Northern Ireland Statistics and Research Agency (NISRA) to identify a number of potential scenarios:
 - i. When would we identify that a scenario has occurred?
 - ii. How would we have identified it?
 - iii. What action would we take or what options would we have?
- 27. Scenario planning will also inform thinking about governance processes for decision making if refinements are needed.

Priorities Ahead of First Release

- 28. Despite the work undertaken so far, there is a significant amount of processing that still needs to be carried out. Particular care will be taken to assure the quality of the statistics and as described in this paper NRS will work in partnership with ISG, ONS, NISRA and local authorities to have confidence in the final statistics.
- 29. Planning for the first release recognises that continued stakeholder engagement is needed for users to have confidence in the estimate.
- 30. OSR recognised the need for this engagement in its second assessment of the 2022 Census published in April 2022. The five requirements it made covered:
 - i. publishing information for users so they can understand the expected quality of data;
 - ii. reviewing engagement plans to communicate confidence in data quality;
 - iii. explaining the coherence and comparability of statistics on trans history and sex;
 - iv. providing supporting information on data quality to users alongside statistical outputs; and
 - v. providing more-detailed information to users of UK census data in Scotland.
- 31. The NRS engagement strategy for the first release consists of three phases:

- i. prior to first release;
- ii. at first release; and
- iii. after first release.
- 32. Describing the technical nature of the steps taken to adapt the design of the census and for users to have confidence in the approach is essential. NRS have a strong track record for communicating effectively with its users having won the UK Analysis in Government Award for Communication in both 2021 and 2022.
- 33. NRS will publish information on its website about the steps it has taken and the quality of the statistics. It also plans to run webinar sessions for users to hear first-hand about the work that has been carried out and ask questions.
- 34. Supporting quality information will be published alongside the first output statistics, as it will alongside subsequent releases across the full range of detailed variables.

Conclusion

- 35. Conducting a census of population and housing is and continues to be an enormous statistical, technical and resourcing challenge. By bringing together expertise from the UK and internationally, NRS will apply a ground-breaking approach using administrative data to supplement the data it collected. The expert led approaches being taken also include significant communication challenges to explain the methods and promote user confidence in the results.
- 36. It is recognised that the delivery timetable is a challenge. NRS is taking steps to be as prepared and responsive as possible over the coming months, using experience from both ONS and NISRA.
- 37. Users must be confident in the statistics produced. NRS is reflecting carefully on the recent OSR assessment and will build on the organisational expertise it has developed in communicating to its users.

Jon Wroth-Smith, National Records of Scotland, 16 April 2023

Gender Identity in Census 2021: recent media coverage and plans for further research

Purpose

1. This paper sets out questions raised about the Census 2021 gender identity (GI) question and estimates, the Office for National Statistics' (ONS) response so far, and plans for further research. This work is being taken forward as a priority and a verbal update will be provided at the Authority Board (Board).

Recommendations

2. Members of the Board are invited to note that:

- i. The census findings on GI are broadly consistent with other sources including previous Government Equalities Office (GEO) estimates and other comparable countries' data. The estimated number of transgender people is slightly lower in the census than in a separate 2021 NHS survey.
- ii. The question on GI was tested thoroughly and the whole census questionnaire was available and translated into nearly 50 languages to ensure it could be properly understood. When other formulations of the GI question were tested for example simply asking respondents whether they are transgender the question was less well understood than the final formulation that was used in Census 2021.
- 3. Members of the Board are invited to consider the issue and advise on the planned research.

Background

4. Census 2021 was the first England and Wales census to ask a question on GI. The question asked, "Is the gender you identify with the same as your sex registered at birth?", with those who answered 'no' being asked to write in their gender identity. The question was voluntary and asked only of respondents aged 16 and over. Scotland's 2022 census asked a voluntary 'trans status or history'.

Criticism of Gender identity data from Census 2021

- 5. Following the publication of the univariate statistics on gender identity,¹ a small number of articles were published relating to sex and GI. Professor Alice Sullivan wrote in the Spectator primarily about self-identification in the sex question. Professor Michael Biggs wrote online about a correlation between higher proportions of people answering that their gender and sex registered at birth were different through the GI question and local authority areas with large migrant populations, potentially with lower English-language skills. He also wrote to us directly asking a small number of questions and asking if we would publish GI data by religion and by language proficiency. The ONS did not make a public response to these articles, but responded to Professor Biggs's separate correspondence.
- 6. Officials from GEO contacted our Sexual Orientation and Gender Identity topic team. We have liaised with them and alerted them to our plans for further research. We have also been in contact with the Office for Statistics Regulation, whom Professor Biggs also contacted, and kept them appraised of our plans and our responses to queries and correspondence.

¹ <u>TS078 - Gender identity - Nomis - Official Census and Labour Market Statistics (nomisweb.co.uk)</u>

- 7. Alongside the multivariate GI tables published on 4 April,² we published an ad-hoc table with national estimates of GI by language proficiency in response to the request from Professor Biggs.³ A further article by Professor Biggs in the Spectator draws on the newly available GI data and reiterates many of the points made in the earlier articles, while also asserting 'policy capture' of ONS by LGBT+ groups and asserting that our question testing was inadequate. Several newspapers (including the Times and Daily Telegraph) ran stories based on Professor Biggs's article, including quotations from Professor Sullivan and another Oxford academic.
- 8. The ONS responded to specific queries from journalists and on 14 April published a statement on the website, summarising the testing and consultation that informed the question design, our confidence in the figures and our plans for further research. This research will be published by mid-June.

Updated quality information page

- 9. The ONS website includes quality information pages relating to each topic covered by the census. The page for sexual orientation and Gl⁴ originally included information on dealing with 'not answered' responses for these voluntary questions; the impact of an adjustment made to data for students; and the potential for lower reliability of proxy responses for these sensitive topics.
- 10. The page has since been updated (most recently on 17 April) to include information about reliability of estimates; the development and testing of the question; the potential for different interpretations of the questions to affect the results; and the need to be aware of age and geographical patterns when interpreting relationships between GI and other characteristics.
- 11. We have also added a quality notice on the landing page for the sexual orientation and GI multivariate tables, which also links to the quality information page. This notice reads: "Some sub-populations have age and geographic profiles that may affect the relationships with other variables such as education, employment, health and housing. Take care when using this variable with others. We will publish more detailed commentary and guidance later this year."

Research and publication plans

- 12. Plans were already underway for further research on how people answered the GI question in Census 2021 at the time of the recent media interest. These have been expedited following the renewed attention on the estimates.
- 13. The exact plans and resourcing are being finalised at present. At the time of writing (18 April 2023), we anticipate publishing an article or articles covering three aspects:
 - i. Question testing: A summary of the development and testing of the GI question for Census 2021. Primarily drawing on and linking to existing publications, this would describe the range of qualitative and quantitative research undertaken to develop the question, and that the approach taken followed the evidence from this testing.
 - ii. Quality assurance: Setting out what quality assurance was undertaken prior to publication of the data, and any further corroborating evidence published since.
 - iii. Analysis of patterns in the data: To demonstrate what factors might explain the higher figures recorded in some communities, whether that reflects misunderstanding of the gender identity question, and any insight and guidance that may need to be

² <u>Sexual orientation and gender identity data combining multiple variables, England and Wales:</u> <u>Census 2021 - Office for National Statistics (ons.gov.uk)</u>

³ <u>CT21_0008_Census 2021 - Office for National Statistics (ons.gov.uk)</u>

⁴ <u>Sexual orientation and gender identity quality information for Census 2021 - Office for National</u> <u>Statistics (ons.gov.uk)</u>

presented with the data in future. We will seek independent assurance from the Methodological Assurance Review Panel for this analysis.

- 14. The timeframe of publication in mid-June would see the research made public prior to the consultation on the future of the population and social statistics system, which is due to start in late June.
- 15. To accommodate this work, the planned 'compendium' publication looking at other characteristics of the population according to GI will be postponed, to be published later in the year.

Stuart Hallifax, Population Statistics Division, Office for National Statistics, 18 April 2023

Integrated Data Service – Update

Purpose

1. This paper provides an update on the progress of the Integrated Data Programme (IDP), responsible for the delivery of the Integrated Data Service (IDS).

Recommendations

- 2. Members of the Authority Board (Board) are invited to note:
 - i. the IDS is on track for delivery against the overall plan with the exception of Digital Economy Act (DEA) accreditation, which will be concluded as soon as practicable. Programme delivery status remains at amber;
 - ii. the programme delivered the March Public Beta release on 29 March 2023 with the most significant element being the safe outputs browser wrapper which is working as expected;
 - iii. approval for DEA accreditation continues to progress through a collaborative approach within Office for National Statistics (ONS). Once DEA is achieved, the programme will be ready to accelerate onboarding data and users to undertake research and analysis;
 - iv. the programme are finalising key approvals, primarily DEA accreditation and the Central Digital Data Office (CDDO) service assessment;
 - v. The first phase of departmental deep dives is now complete and the second phase starting. In parallel the programme continues to progress through the cross-government Digital, Data and Technology (DDaT) governance boards; and
 - vi. Sir Patrick Vallance has endorsed the need for the IDS as part of the Pro-innovation Regulation of Technologies Review and this will be used to support engagement.

Background

3. The IDS has now entered its Public Beta service phase and the programme is finalising formal service assessment approval with the CDDO. A public announcement will then be made about the IDS being A fully operational service.

Discussion

4. Updates of relevance include:

Milestone progression

- 5. The IDS entered Public Beta Service on the 29 March.
- 6. At launch the Public Beta release includes:
 - i. New technical solutions are all part of the Safe Output capability. These have been successfully implemented and are now available for use for both Office for National Statistics (ONS) and external IDS users.
 - ii. Initial data integration capabilities using the IDS Address index to integrate data and realised the increased value of such data for research.
 - iii. Guidance and tooling to support data ingest, as well as a catalogue and metadata solution to support finding and exploiting data.
 - iv. A user centric capability and purpose-build IDS support service to support existing users and ongoing IDS expansion.
 - v. A defined process for analytical project accreditation and output dissemination.
- 7. The programme aims to conclude submission of evidence for the DEA accreditation for the IDS as soon as practicable. This represents a delay of around a month, as additional evidence beyond that expected has been requested. The programme is working through these timescales with the independent assessors, with an ambition to submit before the end of April and positive DEA accreditation from the Research Accreditation Panel (RAP) to follow. A further update will be provided in the Board meeting.

- 8. Given the extended DEA accreditation process, work will continue with the Super Early Adopters (SEAs) to prepare the pipeline for analysis projects. DEA accreditation brings enormous benefits but must not be a blocker to progress.
- 9. Broader programme delivery remains on track against the plan, with a current delivery confidence remaining at Amber.
- 10. The programme will ramp up engagement significantly to onboard users, with Super Early Adopters being the priority. Data will be brought in to support ongoing government analytical priorities.

Securing buy-in for the IDS: Cross-government engagement update

- 11. The first wave of departmental deep dives has been completed with the following departments: CDDO, Ministry of Justice (MoJ), Home Office (HO), HM Revenue and Customs (HMRC) and Department for Education (DfE). Department for Work and Pensions and Department for Levelling Up, Housing and Communities will take part in the second wave in May. The programme is also liaising with other government departments including HM Treasury, Department for Environment, Food and Rural Affairs and Food Standards Agency.
- 12. A retrospective with CDDO will take place on 17 May to share learnings from the deep dive sessions and how the IDS will action these.
- 13. In parallel, the programme is engaging with key cross-government DDaT boards to seek endorsement for the architectural approaches.
- 14. Positive endorsement was received from Chief Technology Officer Council on the 31 March and the Chief Data Officer Council on the 4 April.
- 15. The programme will attend the Functional Leaders Group meeting on the 9 May. These steps lead up to Digital Data Board on 22 June.
- 16. Government has endorsed recommendations from the recent Sir Patrick Vallance review, stipulating within that; Departments will engage with the ONS to agree data sharing arrangements with the IDS to make public sector data available to analysts across government. This is a key message for departmental data providers and has been shared through IDS strategic communications. Here is a link to the <u>report</u> and <u>Government Response</u>.

Onboarding new users and data

- 17. The SEAs continue to have exploratory access to the IDS, and progress carries on with the five projects from Welsh Government, Department for Health and Social Security, HMRC and 10 Data Science. These will be transferred via the RAP process to full output projects as soon as possible.
- 18. Other project topics include Climate and Health, Synthetic Data, Equalities Data Asset, and Violence Against Girls dissemination project.

Reviewing the Key Performance Indicators (KPIs)

- 19. Jason Yaxley and Alison Pritchard met with Sian Jones and Jacob Abboud to discuss the programme KPIs, where feedback was provided on the proposed KPI options.
- 20. Whilst the programme will continue to monitor the volume of indexed data available and the transactional activity on the Service (the analysis), it would seem the simplest metric of "active" users would enable assessing the growth of the Service over time in a way that can be clearly measured.

Alison Pritchard, Deputy National Statistician for Data Capability, April 2023