Irish Society of Community & Public Health Medicine

Book of Abstracts

ISCPHM Annual Scientific Meeting

3-4 October 2024

The Gresham Hotel (Riu Plaza)

23 O'Connell Street Upper

Dublin D01C3W7

iscphm.ie

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Immunisation

1 - Improving Immunisation Uptake: Assessing the effect of an intervention to increase uptake of school vaccinations in Sligo/Leitrim/SouthD area in a time of resource constraints for the academic year 2022/2023

Dr Walsh, Dr McGowan, Dr McTernan, Dr Devaney, Dr Sludds, Dr Michasik, Dr Mulligan

Introduction

The Sligo/Leitrim area experienced a huge increase in anti-vaccine sentiment beginning in 2015 and school vaccinations dropped significantly.[1-4] Vaccination rates have not returned to pre-2015 levels.

Aims

To assess the effect of a local intervention to improve immunisation uptake in the Sligo/Leitrim/SouthD area for the school year 2022/2023 and to decide if it should continue.

Methods

Parents/guardians who refused any of the vaccines offered through the school programme[5] were contacted either by telephone, standard letter or both and invited to reconsider their decision with the offer of an appointment for the refused vaccine. The numbers changing their minds and consenting to vaccination were counted and the proportional change for each vaccine was calculated.

Results

232 charts had a signed refusal for at least one of the vaccinations offered through the Secondary School Programme. Thirteen percent (28/215) of those refusing HPV, thirty-four percent (36/107) refusing Tdap, and thirty-four percent (35/102) refusing MenACWY changed their minds after receiving the phone call/letter and consented to vaccination. 99 additional vaccinations were administered following the intervention.

Discussion

The final uptake across the three vaccines for the school year 2022/2023 improved by almost 2%, following the intervention to address vaccine hesitancy.[2,6,7] Our results support the continuation of local initiatives which have a positive impact. Vaccine misinformation is placing children at risk from vaccine preventable illnesses.[1-4] A significant number referenced local and social media sites when explaining their views.[3,4] More is needed to address misinformation on all sites. Class lists are needed to identify children who did not return a consent form and who remain unvaccinated.

Recommendations

- The intervention should continue while refusal rates remain high
- Ongoing assessment of vaccine uptake rates is recommended
- Assess what specifically helped motivate parents to change their mind

Ethics approval status

Not required as this is an audit/quality improvement initiative

Funding/Acknowledgements
No funding received for this audit

Conflicts of Interest
No conflict of interest.

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2 - An audit of immunisation uptake among Beneficiary of Temporary Protection (BOTP) and International Protection Applicants (IPA) in County Galway: Barriers and strategies

Dr. Alan Devine, Community Medical Doctor, Migrant/Inclusion Health, CHO2; HSE West

Introduction

Recent measles outbreaks in Ireland highlight that MMR uptake is <90% (WHO recommends >95%).[1] Suboptimal immunisation rates increase risk of infectious diseases, especially in congregated settings. Migrants face a disproportionate burden of vaccine-preventable diseases due to lower immunisation rates and poor conditions in their countries of origin.[2,3] The CHO2 Migrant Health Team provide catch-up vaccinations, targeting children and young adults (<23 years), prioritising MMR and polio. Adults are offered MMR if needed.

Aims

1. Audit immunisation uptake in a representative sample of BOTPs and IPAs.
2. Identify barriers to vaccination.

Methods

Between January-June 2024, 1,014 (182 BOTPs, 832 IPAs) were offered catch-up vaccinations across 80 sites (56 for BOTPs, 24 for IPAs).

Vaccine records were assigned numbers. Using Excel, a random list of 100 records was generated for each cohort. These were audited to determine if vaccination occurred, to compare uptake against HSE/WHO targets

Records from non-attendees or those with contraindications were excluded (12 BOTPs, 28 IPAs). Barriers were identified through thematic exploration during consultations.

Results

Among the sampled records, 93% of IPAs and 78% of BOTPs completed immunisations, both below HSE/WHO recommendations of, for example, >95% MMR uptake.

Barriers identified included communication, logistical challenges, vaccine side effects, misinformation/mistrust, and uncertainty about healthcare entitlements.

Discussion

Neither cohort met targets, creating potential risk.

Limitations

We receive data for migrants under 23 only (priority group), but we also vaccinate older migrants, complicating analysis. e.g. 9/9/24;1935 BOTP's and 613 IPA's under 23 in Galway. Future studies could explore differences between attenders and non-attenders, and individual vaccine acceptance.

Conclusion

Low vaccination rates jeopardise the health of migrants and communities receiving them. The barriers identified indicate that tailored, culturally-sensitive public health strategies are required to improve vaccination uptake among these groups[4,5]. We recommend tackling language barriers, increasing community outreach, and building trust in healthcare.[6,7,8]

Ethics approval status

Ethical approval not required or sought

Funding/Acknowledgements

None

Conflicts of Interest

None

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3 - An Initiative to Promote and Improve Immunisation Returns from GPs to the Local Immunisation Office in Donegal

Dr Jen Doherty, CMD, Immunisation & Child Health & Karen O'Loughlin, Immunisation Department, Dr. Ide Nic Dhonncha, PMO, Community Medicine & Kevin Monaghan, PMO Office.

Introduction

In late 2023 and early 2024, the Immunisation Taskforce for CHO1 met to identify contributing factors to declining primary childhood immunisation (PCI) uptake rates. The IT systems supporting childhood immunisation were one of the areas identified for focus and action, with particular attention paid to the reported issues in managing information on immunisation returns sent by GP practices.

Aims

The aim is to promote the use of GP IT systems already in use by the majority of GP surgeries to submit returns electronically (i.e., via dedicated email addresses) creating a standard for all surgeries which will improve efficiency and the timely return of immunisation data over 2024/2025.

Methods

Using the systematic approach of quality improvement,[1] contact was made with a number of practices that use the GP practice software programs, to determine if it was viable to run suitable reports containing all the required information for uploading onto the Schemes database. This was followed by a letter, issued via email from the Primary Care Manager for CHO1 to further encourage all GP practices in Donegal to submit returns electronically.

Results

As of the 12th June 2024, GP practices have responded positively with 25 out of 42 (60%) now submitting PCI returns electronically, and so far, feedback from administration staff, both in the HSE Local Immunisation Office and in the practices themselves, has been positive overall (Table on poster). It is anticipated that this initiative will be further promoted over the coming months via direct contact with GP surgeries.

Conclusion

Using the framework for improving quality in our health service (2016),[1] this initiative has demonstrated the need for an ongoing integrated approach, ensuring a measurable improvement in the reporting of data on vaccination returns from GP practices. A re-evaluation on the uptake by practices is planned for next year.

Ethics Approval Status

Not applicable

Funding and Acknowledgements

None

Conflicts of Interest

None

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4 - Opportunistic MMR Vaccination in a Paediatric Cohort – Responding to New Challenges

Laura Mannion, Deirdre Foley, Trisha Hynds, Kara Tedford, Sonja Fitzpatrick, John Fitzsimons, Aoibhinn Walsh, Eimear Kitt, Sarah Geoghegan

Background

In March 2024, a national incident management team formed to respond to measles outbreaks in Europe. A catch-up MMR vaccination campaign was commenced in general paediatric clinics at CHI at Crumlin and the Lynn (social inclusion) clinic at CHI at Temple Street.

Aims

This quality improvement initiative explored pathways allowing opportunistic MMR vaccination to be incorporated into routine paediatric outpatient appointments.

Methods

The target population were patients attending the above clinics and their family members (under the age of sixteen) who had not yet received MMR vaccination or were incompletely vaccinated. Outpatients attending outreach clinics targeting disadvantaged children were screened using prompt sheets placed on their clinical record reminding clinicians to ask about vaccination status. Inpatients were also screened during their hospital stay. Nurse specialists delivered vaccinations. A second dose of MMR was given at the next clinic visit if required.

Results

Twenty-one MMR doses were delivered between April – June 2024; nineteen were given at the Lynn clinic. Three were delivered to siblings of patients. Many children attending clinic were born in jurisdictions where vaccination programmes are limited, or have halted due to political upheaval, which may account for so many being delivered there.

Discussion

This initiative used resources which are widespread amongst community practices, meaning it can be applied at different points of patient contact. Staffing shortages and additional training requirements represent major barriers to opportunistic vaccination. Integrating vaccination administration modules into training requirements could supply clinical settings with appropriately trained personnel.

Conclusion

Opportunistic vaccination helps optimise each healthcare encounter, particularly in cohorts like those presenting to the Lynn clinic, who may struggle to access primary care.

Ethics Approval Status

Not applicable

Funding and Acknowledgements

No funding was provided for this project.

Conflicts of Interest

None

References

My suggestions

1. Death of an adult with confirmed measles in Dublin and Midlands Health Region [Internet]. HSE.ie. 2024 [cited 2024 Sep 22]. Available from: https://www.hse.ie/eng/services/news/media/pressrel/death-of-an-adult-with-confirmed-measles-in-dublin-and-midlands-health-region.html

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eHealth & Telemedicine

1 - Completion rate of vaccination consent forms used for secondary schools in 2023-2024

Dr Lavinia Panaite, Dr Alice Bailey, Dr Elizabeth Bowen, Dr Anne Marie Coughlan, Dr Mairéad McDonnell, Cork Kerry Community Healthcare CHO4 – South Lee, St Finbarr's Hospital

Background

All children in first year of secondary school in Ireland are offered 3 vaccinations (HPV, Tdap and MenACWY) through the HSE-run School Immunisation Programme. Consent forms are posted to schools and school staff assists in disseminating them to parents, and then returning them to the HSE. These documents are then screened by Community Medical Doctors(CMDs) prior to vaccination date, in order to ensure consent is valid and that any relevant medical information has been documented/obtained.

Due to changes in the HPV schedule,[1,2] new format consent forms were issued for the academic year 2023-2024.

Aims

The audit was designed to assess the completion rate[3] of vaccination consent forms, which from past experience was expected to be approx. 85%.[4] We also quantified the input required from CMDs in South Lee to assist the completion of incorrect/incomplete forms.

Methodology

The participating CMDs kept records of the forms screened and the attempts made to contact parents/guardians, using pre-set criteria. Data collection was prospective over March-April 2024, using excel spreadsheets or handwritten reports.

Results

278 screened consent forms were audited, and 144 of these (51.8%) were incomplete/incorrect. 220 phone-calls were made, the main reason to contact being clarification of the HPV consent in 111 cases, followed by medical history queries (26 cases) and incomplete consent (11 cases). 27 refusals cases were also contacted.

Discussion

The 48.2% completion rate for the new format vaccination consent forms falls behind the expected 85%. The majority of the incorrect forms pertained to HPV consent section. This leads to a considerable number of phone-calls needed to be made to amend the forms before the vaccination clinics.

Recommendations

It would be recommended that the consent form for secondary school immunisations undergoes some changes in the HPV consent section for the following academic years, then audit can be repeated.

Ethics Approval Status

Not applicable

Funding and Acknowledgements
No funding was provided for this project.

Conflicts of Interest
None

References

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2 - Pilot Study Assessing the use of Attend Anywhere Platform in Community Medicine

Dr. Maria McTernan, Dr. Ide Nic Dhonncha, Dr. Stephen Sludds, Dr. Karen Mc Gowan, Dr. Amanda Devaney, Dr. Sarah Mulligan, Dr. Cathriona Walsh, Dr. Anna Michasik

Introduction

The Slaintecare programme[1] espouses the need for an integrated model of patient care, including the use of eHealth. Attend Anywhere is a web-based platform for health care providers to offer video call access to their patients as part of their 'business as usual', day-to-day operations.[2] It was introduced in 2020 to the Irish public health service.

It was envisaged that utilising video consultation prior to a clinic appointment, would improve both patient experience and service efficiency.

Aims

To assess parents' experience of using the Attend Anywhere platform pre-clinic video consultation.

Methods

In June 2024, five Leitrim children were randomly selected to partake in the study following Public Health Nurse (PHN) referrals with a concern over social/communication delay. Parents were contacted by phone and verbal consent was obtained as per the Irish Medical Council.[3] Attend anywhere appointments were arranged and an anonymous questionnaire was completed by parents following the clinic appointment and posted to the Community Medical Department.

Results

All participants found the platform user-friendly and recommended it.

Feedback points from parents included:

- Faster appointment at a time that suited
- Clinic appointment shorter and less anxiety as rapport already established
- Less distraction, could express concerns more freely
- Both parents more likely to attend
- Facilitated attendance

Discussion

The Health Service Executive (HSE) is planning, prioritising and investing in digital capabilities that support Sláintecare and HSE goals for service improvements.[4] The use of the video consultation pre-clinic appointment provides definite benefits for parents and doctors and could strengthen our role in Community Medicine.

A further study with a larger sample size is recommended and the platform may also be extended out to other referral groups (e.g. raised BMI).

Ethical Approval

No ethical approval was sought for this study.

Conflict of interest

The authors have no conflicts of interest to declare and received no funding.

References

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Child Health

1 - Understanding of Infant Mental Health amongst Health and Social Care Staff in the West of Ireland: A Survey

Adam Chambers[1], Jeananne Garavan[1], Ciara O'Riordan[2], all members of the CHO2 Regional Infant Mental Health Forum in June-July 2023. 1. Psychology Service, Community Healthcare West, Primary Care Centre, Castlebar, Co. Mayo; 2. Community Medical Department, Castlebar, Co. Mayo.

Introduction

Infant mental health (IMH) refers to the optimal development of infants within the context of secure and stable relationships with their caregivers.[1] Early relationships play a critical role in an infant's physical, social and emotional development and long term health outcomes.[2] Optimising these early relationships is of relevance to all health and social care workers.

Aims

To establish a baseline of staff's awareness and perceived understanding of IMH to inform service planning.

Methods

An anonymous online survey consisting of 17 questions was circulated via email to HSE and Tusla staff in the CHO-2 area in June 2023. Descriptive statistics were used to analyse quantitative data and qualitative data was reviewed for key themes.

Results

350 members of staff from various disciplines and service sectors completed the survey. 70% of staff had heard of the term IMH; however, 51% rated their understanding as "Poor" or "Fair". 74% considered IMH "Relevant" or "Very Relevant" to their role and 88% believed the parent-infant relationship was "Very Important" to the child's wellbeing and outcomes. Approximately 1 in 3 felt "Not Confident" or "Unsure" working with the parent-infant relationship. Staff felt they lacked in IMH education/training (81%) and needed additional training (83%).

Review of the qualitative data highlighted the need for additional staff training and greater IMH-informed service provision.

Conclusion

The majority of surveyed staff were aware of the concept of IMH, however approximately half did not feel that they had a good understanding of IMH. Despite this, most staff recognised the intrinsic value of relational approaches from their experience working with parents/infants and believed IMH was relevant to their role.

Recommendations

Further staff training and awareness building is needed to ensure an IMH informed culture of practice.

Ethics approval status

Ethical approval was submitted to the Galway Clinical Research Ethics Committee. It was deemed that the survey did not require ethical approval as the study came under a Service Quality

Improvement Project where anonymised data is being used (REC letter shown to Abstract Review Committee).

Funding/Acknowledgements
N/A

Conflicts of Interest
N/A

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2 - New abnormal hip imaging policy in the Community Medical Department in CHO1 : Help or Hindrance?

Dr A Devaney, Dr S Mulligan, Dr K McGowan, Dr S Sludds, Dr M McTernan, Dr A Michasik, Dr C Walsh, Dr I Nic Dhonncha. Community Medical Department, Sligo / Leitrim

Background

Abnormal hip exam is a common finding necessitating hip imaging, with referral to Orthopaedics if imaging is abnormal.[1,2] The Orthopaedic Department in Sligo University Hospital recommended new referral criteria– if the acetabular index (AI) is above normal but <30 degrees a repeat X-ray in 6 months is advised. Children with significant dysplasia (AI >30degrees) warrant Orthopaedic referral.

Aim

To identify changes in referral patterns to Orthopaedics following introduction of an abnormal hip imaging policy.

Methods

We retrospectively identified 200 children with hip imaging requested in Sligo/ Leitrim between September 2023 and July 2024 using our electronic database as this is a recorded outcome measure. A manual search of electronic records to review radiology requests and reports was completed. Data was recorded and analysed using Microsoft Excel.

Results

200 children aged 3-84 months had hip imaging, 89% were under 24 months.

"Abnormal radiology" was identified in 51(26%) cases. Of these 8 had an AI of > 30 degrees, 1 diagnosed DDH, another rickets and 1 had upturned left acetabular margin.

40(78%) children were reported as having AI <30 degrees. In 5 cases radiology advised orthopaedic referral due to other findings. 4 had ultrasound as repeat imaging (2 normal, 2 abnormal requiring further X-Ray in 6 months). 31(61%) cases advised repeat X-Ray. 23 repeat X-Rays are completed, 7 were persistently abnormal requiring Orthopaedics and 16 were reported as "normal". 8 repeat X-Rays are pending.

Discussion

Adopting the new policy resulted in a 31 % reduction in Orthopaedic referrals, as their repeat imaging was normal, eliminating unnecessary onward referral.

Conclusion

The new policy added additional work to the Community Medical Department but ultimately resulted in less children requiring an orthopaedic hospital appointment, potentially reducing waitlists for those with greater hip pathology. We recommend continuing following this policy with ongoing monitoring.

Ethics approval status

Not required as this is an audit/quality improvement initiative

Funding/Acknowledgements

No funding received for this audit

Conflicts of Interest

No conflict of interest

References

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Sexual Health

1 - A Retrospective Study of the number of cases of Chlamydia and Gonorrhoea amongst attendees at a public STI Clinic in the West of Ireland in 2022-2023.

Sheffinea Koshy[1], Puiman Yan[1], Fiona Kyne[1,2], Angela Kearns[1,3]. 1.School of Medicine, University of Galway, 2. STI Clinic, Mayo University Hospital, Castlebar, 3. STI Clinic, Portiuncula University Hospital, Galway.

Background

Sexually transmitted infections (STIs) are known to have serious, long-term health implications and are associated with genital malignancies, pelvic inflammatory disease, and infertility. In Ireland the HPSC reported a 30.7% increase in the overall rate of STI notifications and a 68% rise in gonorrhoea cases in 2023 compared to 2022[1,2]. There has also been a rise in oropharyngeal gonorrhoea infections.

Aims

This project aims to examine the numbers of Gonorrhoea (GC) and Chlamydia (CT) infections amongst attendees in Mayo University Hospital (MUH) in 2022 and 2023.

Methods

Data were collected retrospectively from STI clinic records in MUH from January 2022 -December 2023. All patients who tested positive for CT and GC were included. The data included anonymised patient demographics, anatomical infection sites and clinical diagnoses. This information was assembled in Excel and analysed using descriptive statistics.

Results

31 (10 female, 21 male) patients in 2022 and 34 (15 female, 19 male) in 2023 had a confirmed diagnosis of gonorrhoea (n=27; 6 female, 21 male) or chlamydia (n=41; 20 female, 21 male). Comparing 2023 with 2022, the number of Gonorrhoea infections increased by 100% in females and 33.3% in males. Oropharyngeal gonorrhoea increased from 0 to 4 cases in females, while there was a 133% increase in males. No significant difference in chlamydia cases was observed.

Discussion

The study highlights a substantial increase in gonorrhoea cases among both males and females, especially in the oropharyngeal region, while chlamydia cases remained stable over the observed period. This underscores a growing national concern regarding gonorrhoea infections that warrants further attention and intervention.

Conclusion

The adaptation of public health interventions through targeted education, screening and prevention strategies is crucial for addressing STIs particularly oropharyngeal gonorrhoea. Further data should be gathered, retrospectively and prospectively to detect any emerging public health threats.

Ethics Approval Status

Approved by the Mayo University Hospital, REC - 20240307

Funding and Acknowledgements
No funding was provided for this project.

Conflicts of Interest
None

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2 - Chlamydia Trachomatis Treatment Standards in the West of Ireland - A Multi-Centre Retrospective Clinical Audit.

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* = Joint First Authors.

Background

Chlamydia trachomatis (CT) was the most reported sexually transmitted infection (STI) in Ireland in 2023 and notification rates are increasing.[1] Guidelines from the British Association for Sexual Health and HIV (BASHH) provide standards of care for CT.[2]

Objectives

To audit CT detection and treatment methods at Mayo and Portiuncula Hospitals' STI clinics against BASHH standards:

1. All sites of sexual contact are tested.
2. Recommended detection methods include vulvovaginal swabs for women and first-catch urine for men.
3. Lymphogranuloma venereum (LGV) testing is recommended in proctitis and men-who-have-sex-with-men.
4. Antimicrobials include doxycycline and azithromycin.
5. Management includes point-of-care counselling regarding partner notification.

Methods

Data were collected retrospectively from clinic records in the two included sites between January-December 2023. All patients who tested positive for CT were included. The data was assembled in Excel and analysed using R-Studio.

Results

CT was detected in 37 patients, with an overall mean age of 28.97 ± 8.41 years. 21 male (56.8%) and 16 female (43.2%). Urine testing was diagnostic in 16 cases (43.2%), vaginal swabs in 15 (40.54%), rectal swabs in 4 (10.8%), throat swabs in 2 (5.41%). LGV testing, when conducted was negative. All 37 (100%) were treated with oral doxycycline, 100mg bd for 7 days. All 37 (100%) were provided with written information about their diagnosis and partner notification was conducted and documented. Compliance with treatment standards was 100%.

Discussion

The cases analysed were fully compliant with the BASHH auditable standards, in detection and management. Most cases were detected with urine testing and vaginal swabs. However, as only two clinics have been included, analysing cases from larger centres would provide further insight into CT treatment in the west of Ireland.

Conclusions

The included clinics are compliant with the recommended standards of treatment for CT. Further work could include larger centres.

Ethics approval status

As a clinical audit, ethical approval was not required.

Funding/Acknowledgements

No funding was received for this audit.

Conflicts of Interest

To our knowledge there are no conflicts of interest.

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3 - Sexual Health Services in a Public Outpatient Clinic in the West of Ireland. A survey of patient's current sexual health practices and preferences for sexual health services

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Introduction

In Ireland, the prevalence of sexually transmitted infections (STIs), particularly chlamydia, gonorrhoea and genital herpes has increased.[1-4] This has resulted in an increased need for quality sexual health services. Despite this, patient preferences of sexual health services and their sexual health needs are not well documented.

Aims

The aim of this study is to find out about the current sexual health practices and preferences regarding sexual health services of patients attending the sexual health clinic, to discover if patients are using free STI testing services and if they are practicing safe sex through condoms.

Methods

Data was collected via a survey questionnaire at Mayo University Hospital STI Clinic, Castlebar from April 1st to May 31st 2024. Surveys were self-administered and were completed anonymously. Data from 43 participants was analysed using descriptive statistics and compared to previous literature.

Results

28.6% of participants had never attended a STI Clinic and 55% attended due to symptoms. 83.7% of participants chose STI Clinics as the preferred location for sexual health services with 82.5% expecting screening for STIs as part of a check-up. 23.3% of participants had used the SH:24 Online Sexual Health Service with 70% reporting being satisfied with the service. 34.2% of participants used a condom the last time they had sex.

Discussion

The data obtained was consistent with previous literature, showing STI Clinics as the preferred location for check-ups, the importance of STI screening and symptoms being the main reason to attend STI clinics.[5-6] In previous studies, condom use was lower (20.2%) and patient satisfaction with online testing was over 90%.[7-9]

Recommendations

The data obtained could prove a starting point for further analysis of patient sexual health needs on a larger scale in Ireland. Ongoing advertising of free STI testing and condom use is also recommended.

Ethics Approval Status

Approved by Mayo University Hospital. REC Number: 20240309

Funding and Acknowledgements

No funding was provided for this project.

Conflicts of Interest

None

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4 - Provider Experiences with Sexually Transmitted Infections Screening and Treatment in General Practice in the West of Ireland

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Introduction

Sexually transmitted infections (STIs) present a significant public health challenge, and their prevalence in Ireland is rising[1]. The role of general practitioners (GPs) is critical in the detection and management of STIs[2]. However, there is limited understanding of the experiences and practices of GPs regarding STI screening and treatment, especially since the introduction of the national home STI testing service (SH24) in 2022[3,4].

Aims

To evaluate the indications for STI screening and assess the level of confidence in treating common STI's in General Practice (GP). Also, to examine the impact of SH24 on STI presentations to GPs for screening & management.

Methods

A quantitative Microsoft Forms survey was distributed to 93 individual General Practitioners who are members of the Mayo GP's WhatsApp group in May 2024. This 14-question survey focused on STI screening and management. Quantitative data was analysed using descriptive statistics.

Results

The response rate was 58% (54/93). The main indications for GPs screening were patient requests (92%), symptoms (89%) and high-risk behaviours (76%). Most GPs were confident in treating Chlamydia (90.7% 48/54). However, the confidence was lower for treating Genital warts (53.8%), Genital Herpes (62.5%) & Gonorrhoea (45.3%). Over 61% of GP's have recommended the SH24 home testing to patients. Since SH24's introduction, 30% of GP's noted a reduction in attendance for STI screening, and 38% of GP's have treated a positive SH24 result.

Discussion

The study highlights that while a significant majority of GPs are confident in treating Chlamydia, their confidence diminishes for other sexually transmitted infections.

Conclusion

Increased education on STI management in general practice is essential, and home testing kits have proven beneficial for screening, warranting further research to evaluate their effectiveness.

Ethics Approval Status

Mayo University Hospital, REC – 20240308

Funding and Acknowledgements

No funding was received for conducting this study.

Conflicts of Interest

To our knowledge there are no conflicts of interest for this research.

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Public Health & Research Methods

1 - How can Big Data be used to answer public health research questions?

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Introduction

The use of large datasets of routinely or automatically collected clinical and administrative data, known as Big Data (BD),[1] for research purposes has become increasingly common.[2,3]

In the absence of a single comprehensive data source, linking multiple data sources has proven valuable in public health research.[4]

Aim

The aim of this paper is to describe the process of accessing BD, linking sources, and validating outcomes to address specific public health questions using the Honest Broker Service (HBS)[5] in Northern Ireland.

Methods

This paper provides a qualitative description of the processes involved in using BD from the HBS to answer a research question in 2017.[6] Anonymized data from the Northern Ireland Maternity System, Enhanced Prescribing Database, and HeartSuite database were linked and accessed in HBS. The author used Stata to analyse the data to answer research questions.

Findings

Ethical approval was obtained from the National NHS Research Ethics Committee. Permission to access data was granted by the HBS, which acted as a safe haven for conducting BD research. Training on the use of the HBS was completed to ensure confidentiality, anonymity, and data protection.

Successfully linking routinely collected BD from multiple sources facilitated the creation of a robust and more comprehensive dataset from which conclusions could be drawn.

Conclusions and implications

Using clinical and administrative BD from different sources and linking the data through a safe haven, like the HBS, is feasible and can effectively answer research questions.

Data anonymization and controlled access are crucial for ensuring the ethical use of clinical and administrative BD.

While data quality varied across databases, the linkage process enhanced the overall value of the research outputs.

Using and linking clinical and administrative BD for public health research offers both strengths and limitations, which should always be acknowledged.

Ethics approval status

Ethical approval: Ethical approval was obtained from the NHS Research Ethics Committee (No. 17/SC/0103, 27 February 2017).

Funding/Acknowledgements

The study was funded by Vice-Chancellor's Research Scholarship Ulster University. Northern Ireland Chest Heart and Stroke covered the costs of data preparation carried out by HBS.

Conflicts of Interest

No competing interests for any authors.

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2 - Distinguishing between audit, quality improvement, and research

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Introduction

In a clinical setting it may be difficult to decide if a project is a clinical audit (CA), a quality improvement (QI) initiative, or research since they frequently overlap. However, it is easier to plan, conduct, and write up a project ethically when these are clearly distinguished.

Objective

To present an approach for distinguishing CA and QI from research, to support project planning, ethical conduct, and write-up.

Methods

I drew on national or international guidelines, relevant training resources, and medical literature to compare the objectives and methods for CA, QI, and research, identifying distinguishing features.[1–4]

Findings

CA aims to compare actual clinical practice with the standard expected. QI aims to improve healthcare service quality. CA is a QI tool. Both are conducted within normal clinical practice, and draw on data which might/should ordinarily be collected during normal clinical practice. In contrast, research aims to create new knowledge and often requires new data.

Questioning the aims/objectives of a project and its data requirements provides an approach for distinguishing CA/QI from research.

Discussion

Projects where data collection and analysis are conducted as part of normal clinical practice do not require patients' consent to use the data for CA/QI purposes. Whereas research, which usually requires collecting additional data or analysing existing patient data in a new way that is not specifically intended to inform the individual patient's care, does require informed consent and may require ethical approval from a research ethics committee before commencement.

Conclusions

Questioning the aims of a project clarifies what data is needed, what type of project it is, and whether patients' consent and/or ethical review is needed to safeguard patients. Feedback could be used to improve this questioning approach.

Ethics approval status

Not applicable

Funding/Acknowledgements

No funding was received for this research.

Conflicts of Interest

The author declares that she has no conflicts of interest relevant to this research.

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3 - A review of regulatory theory to provide insights into medical device regulation

Dr Kathleen Harkin[1], Prof Jan Sorensen[2], Prof Steve Thomas[1]. 1. Centre for Health Policy & Management, Trinity College Dublin; 2. Royal College of Surgeons of Ireland.

Introduction

Medical device (MD) safety is a public health issue,[1] and regulation is thought to be important for ensuring their safety.[2] However, although theoretically informed research is generally considered superior to research lacking a theoretical basis,[3] there is little theoretical research reported in the literature on the regulation of MDs from a patient safety perspective.

Objective

To explore regulatory theory, examining the implications of competing theories and their application to MDs from a patient safety perspective.

Methods

We conducted a narrative review of literature describing regulatory theories to explore what is meant by regulation, why governments regulate, and how.[4] The relevance of competing theories on their application to MDs were examined and patient safety implications identified.

Findings

The Theory of Perfect Competition suggests that, when key assumptions hold true, market forces will result in the most efficient allocation of resources.[5] However, when they don't, market failure results.[6] Governments frequently regulate such markets.[7,8] Stigler suggests that they do so to serve either public or private interests,[9] for example, by requiring information to be made publicly available or kept confidential for industry's sake.[10]

Discussion

If it is assumed that the regulation of MDs is intended to protect patients from faulty, unsafe, or ineffective devices,[11] then it would be expected that regulation would demand transparent evidence of safety and effectiveness prior to marketing MDs.[12–14] However, MD regulation limits evidence requirements,[15 Article 61] allowing MDs to enter healthcare markets with insufficient evidence of efficacy,[16] and insists regulators maintain confidentiality of the evidence submitted to them,[15 Article 73(3), Article 109] serving private not public interest.

Conclusion

It should not be assumed that regulation is intended to safeguard patients.[9] Doctors and patients should not assume that MDs are safe and effective and are advised to ask for the evidence they need for informed decision-making.[16]

Ethics approval status

Not applicable

Funding/Acknowledgements

This research was funded by the Health Research Board SPHERE/2013/1

Conflicts of Interest

The authors declare that they have no conflicts of interest relevant to this research.

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4 - What does the CE Marking on medical devices really mean for patients?

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Introduction

Following the recent implant scandal,[1] the Health Service Executive (HSE) issued a national patient safety alert stating that medical devices (MDs) used in the HSE must be CE marked.[2] CE marking is legally required to sell MDs in the European Union (EU).[3] '*CE marking indicates that a product has been assessed by the manufacturer and deemed to meet EU safety, health and environmental protection requirements*.'[4] Compliance with CE marking requirements is assumed to improve safety,[3,4].

Objective

To identify the CE marking requirements and explore their implications for patient safety.

Methods

We conducted a documentary analysis of EU legislation and policy documents governing the sale of medical devices in the EU.[3,5,6] The CE marking requirements were analysed from a patient safety perspective.

Findings

The key CE marking legal requirements are set out in Annex I of the Medical Device Regulation (MDR).[3 Annex 1(1)] Manufacturers must classify their MDs, establish quality and risk management systems, assess MDs' benefit-risk balance, plan post-market surveillance,[3 Annex 1 (1)] and for high-risk/implantable devices, pay designated (often for-profit) organisations to check their compliance before affixing the CE marking.[3 Article 52]

Discussion

CE marking ensures the establishment of systems promoting high quality and low risk, but neglects outcomes evaluation. Clinical data need not be derived from the actual device.[7] Furthermore, post-market surveillance is poor, generally relying on voluntary reporting of harm (not effectiveness).[8] MDs are required to be safe and effective, but implementation is poor,[6] resulting in a dearth of safety and effectiveness evidence.[9,10]

Conclusion

CE marking does not guarantee the effectiveness or safety of MDs and conceals the lack of available evidence.

Recommendations

Policymakers, doctors, and the public need to be made aware of this. Establishing ways to improve the evidence base for MDs, such as a national implant registry, require further research.

Ethics approval status

Not applicable

Funding/Acknowledgements

This research was funded by the Health Research Board SPHERE/2013/1

Conflicts of Interest

The authors declare that they have no conflicts of interest relevant to this research.

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