

QPS TALKTIME



A community of quality and patient safety improvers

12 October , 2021

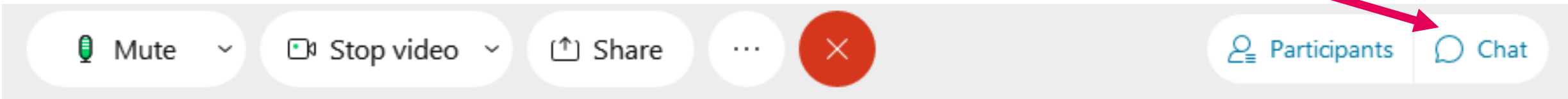
Clinical Decision Support and Quality Improvement The challenge of comorbidities

CHAMPION PARTNER ENABLE DEMONSTRATE www.qualityimprovement.ie @NationalQPS



Welcome

- **Sound:** Computer or dial in:
 - Telephone no:
 - Irish: 01-5260058
 - UK: +44-20-7660-8149
 - Event number: 174 436 2259#
- **Chat box function**
 - Comments/Ideas
 - Keep the questions coming!
- **Recording**
- **Engage with the team**
 - Twitter: @QPSTalktime / #QIreland
- **New feature**
 - Short feedback form after the session, please help us to improve our QPS Talktime Webinars
 - A window will pop up before logging out



To get started ... we invite you to

Share using the chat box

- Your name, work and where you are joining us from ...
- Do you often care for people with multiple conditions in your practice?



Speaker today

Host



Dr Maureen Flynn, QPS Directorate



Dr Kieran Walsh, Clinical Director at BMJ. He is the clinical lead of the medical education and clinical decision support resources at BMJ.

Setting the context



Brendan Leen, Area Library Manager, HSE South; Founding Lead, National Health Library and Knowledge Service Evidence Team; Founding Lead and Advisor, COVID-19 Evidence Service.

In conversation with



Dr Conor Malone is the National Healthcare Wikipedian in Residence at NHLKS and Registrar in Health Informatics at St James's Hospital, Dublin. He was the founding HSE/NDTP National Fellow for Innovation and is a former Fellow in Medical Education.



Dr David Hanlon is a GP. He is HSE National Clinical Advisor for Primary Care, Clinical Design and Innovation, with diverse interests that include the design and deployment of Information Technology in healthcare, health economics, the development of Primary Care services and the expansion and diversification of the Primary Care workforce.



Setting the context

National Health Library and Knowledge Service

Evidence Response to COVID-19: Quality, Timeliness and Complications of Comorbidities

Brendan Leen, Area Library Manager, HSE South;
Advisor, National Health Library COVID-19 Evidence Service



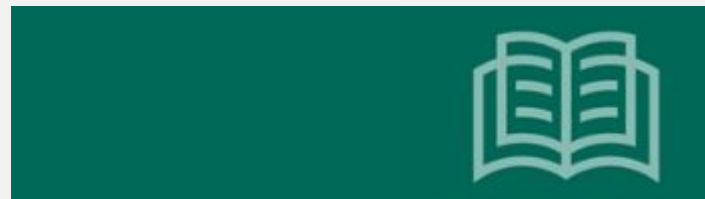
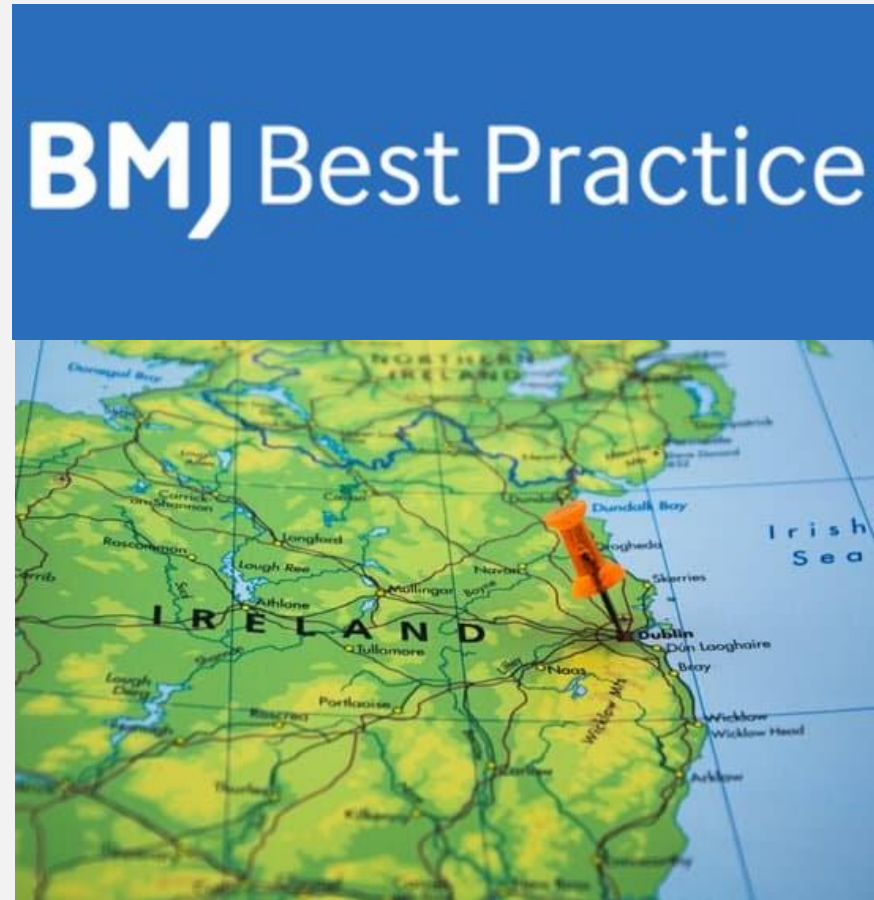
COVID-19 Evidence Service

- Initiated March 2020 and ongoing
- Provides literature searches and evidence summaries on Qs re COVID-19 from frontline health workers, health managers and NCPs
- Assure quality and comprehensiveness – **best available evidence** – as well as speed of response
- Difference in COVID-19? **Time** evaporated. Evidence in condensed, synthesised format



Evidence 'in Time'

- Evidence in condensed, synthesised format
- **BMJ Best Practice:** incorporated into protocol + purchased by National Health Library for all Irish citizens to get validated, better quality information into circulation



COVID-19 Dis / Mis-Information

- Not only fighting a **pandemic**, but also an **infodemic**
- [WHO](#) (23 September 2020): first pandemic in which technology and social media marshalled on global scale to keep people informed, productive and connected; *however*, also widespread circulation of dis- or mis-information
- [WHO](#): “**Mis-information costs lives ...**” Threatens diagnostic testing, or vaccination campaigns; polarizes debate, amplifies hate-speech; allows the virus to thrive
- Call for timely dissemination of accurate information.



Why do evidence summaries matter?

- Vs. Dis / Mis-Information: acquire, appraise and disseminate **best evidence + clinical expertise + patient values and preferences**
- 220+ Qs to date
- 20 pages – 700+ pages
- Quality improvement: synthesizing and providing timely access to best evidence helps protect patients and health workers; helps model and predict the course of the virus; assists in the configuration and design of health services to fight COVID-19.



NIAC Q199: What is the efficacy in preventing transmission?



National Health Library and Knowledge Service | Evidence Team
CURRENT AS AT 02 April 2021
Summary of Evidence: COVID-19 | Question 199
VERSION 1.0

The following information resources have been selected by the National Health Library and Knowledge Service Evidence Virtual Team in response to a question from the National Immunisation Advisory Committee (NIAC). The resources are listed in our estimated order of relevance to practicing healthcare professionals confronted with this scenario in an Irish context. In respect of the evolving global situation and rapidly changing evidence base, it is advised to use hyperlinked sources in this document to ensure that the information you are disseminating to the public or applying in clinical practice is the most current, valid and accurate. For further information on the methodology used in the compilation of this document—including a complete list of sources consulted—please see our [National Health Library and Knowledge Service Summary of Evidence Protocol](#).

QUESTION 199

What is the efficacy of COVID-19 vaccinations in preventing disease transmission to the non-vaccinated?

Question 199 was prepared by the National Health Library and Knowledge Service in collaboration with the Research Subgroup of the National Immunisation Advisory Committee (NIAC).



National Health Library and Knowledge Service | Evidence Team



NIAC

from “standard” Qs
to efficacy



NIAC Q205: Are those with heart failure at greater risk of severe COVID-19 infection?

National Health Library and Knowledge Service | Evidence Team
CURRENT AS AT 24 May 2021
Summary of Evidence: COVID-19 | Question 205
VERSION 1.0

The following information resources have been selected by the National Health Library and Knowledge Service Evidence Virtual Team in response to a question from the National Immunisation Advisory Committee (NIAC). The resources are listed in our estimated order of relevance to practicing healthcare professionals confronted with this scenario in an Irish context. In respect of the evolving global situation and rapidly changing evidence base, it is advised to use hyperlinked sources in this document to ensure that the information you are disseminating to the public or applying in clinical practice is the most current, valid and accurate. For further information on the methodology used in the compilation of this document — including a complete list of sources consulted — please see our [National Health Library and Knowledge Service Summary of Evidence Protocol](#).

Question 205
Are those with heart failure at greater risk of severe COVID-19 infection?

Question 205 was prepared by the National Health Library and Knowledge Service in collaboration with the Research Subgroup of the National Immunisation Advisory Committee (NIAC).

National Health Library and Knowledge Service | Evidence Team
NIAC

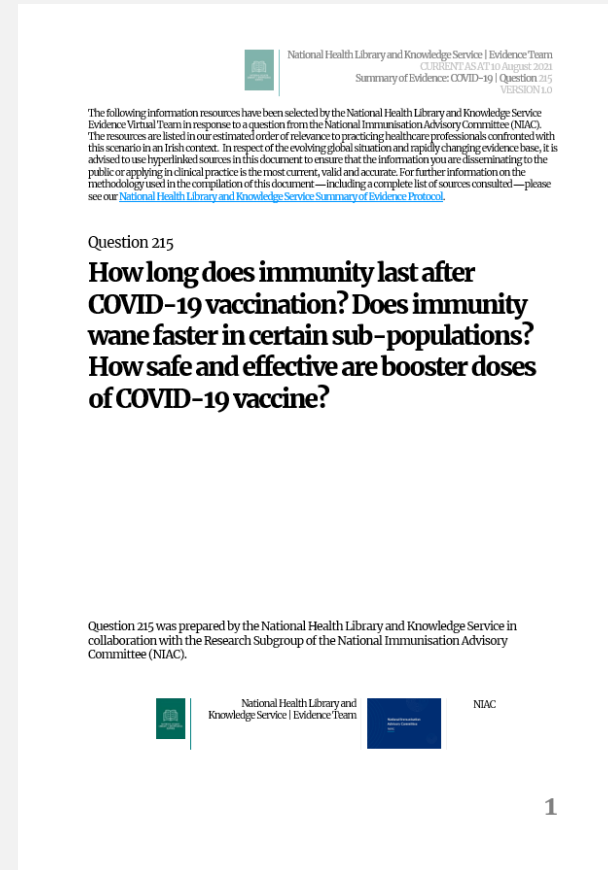
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to more complex Qs
with comorbidities



NIAC Q215: Does immunity wane faster in certain sub-populations?

- Patients receiving dialysis may mount an attenuated immune response to COVID-19 vaccination
- Solid-organ transplant recipients may develop a substantially lower immunological response to mRNA-based vaccines
- There is significant heterogeneity of humoral immune response to COVID-19 vaccines among immunosuppressed individuals, highlighting an urgent need to optimize COVID-19 prevention in these patients.



Clinical decision support and quality improvement - the challenge of comorbidities

Dr Kieran Walsh
Clinical Director
BMJ

Agenda

- The Comorbidities challenge
- Introducing the Comorbidities Tool from BMJ Best Practice
- Clinical Scenario and QI
- Demo



BMJ Best Practice

BMJ Best Practice is a point of care clinical decision support tool particularly useful for junior doctors, multidisciplinary teams, specialists working outside of their specialty and GPs.

It is uniquely structured around the patient consultation with advice on symptom evaluation, test ordering and treatment approach.

Evidence based, continually updated, practical, accessible.

- Ranked one of the **best clinical decision support tools** for health professionals worldwide*
- **Scored highest** in an independent study of diagnostic decision support tools**

* [JMIR - Providing Doctors With High-Quality Information: An Updated Evaluation of Web-Based Point-of-Care Information Summaries](#)

** [Evaluating online diagnostic decision support tools for the clinical setting](#)



Ireland

HSE National Library Service in partnership with the National Ambulance Service and Primary Care have co-funded BMJ Best Practice. This is available to everyone in the Republic of Ireland since 2020.



Focusing on what's important to users



Speed – Find answers quickly and accurately



Actionable - Practical information for use at the point of care



Access - Access evidence easily anywhere, anytime



Assurance - Important updates, trusted clinical evidence

Problems with EBM

- Information overload
- Slow pace of change
- The evidence based “quality mark” has been misappropriated by vested interests
- Statistically significant benefits may be marginal in clinical practice
- Inflexible guidelines and technology driven prompts may produce care that is management driven rather than patient centred
- Lack of personalisation of evidence
- Too much mechanical rule following
- No shared decision making
- **Evidence based guidelines often map poorly to complex comorbidity**

Greenhalgh et al. Evidence based medicine: a movement in crisis?

An issue
underlying many
other problems

The problem with ...
Comorbidities

“

Training from **medical school** onwards, clinical teams, and clinical guidelines, however, all tend to be organised along single disease or single organ lines.

The BMJ - Rising to the challenge of multimorbidity
Chief Medical Officers for England, Wales and Scotland



Comorbidities in the acute setting

Most patients in the acute setting have more than one medical condition, but clinical guidelines only focus on single conditions.

When comorbidities aren't taken into account, patients get **suboptimal care** leading to **worse clinical outcomes**.

Comorbidities also associated with **longer lengths of stay**.

Comorbidities

- One in four adults suffers from more than one condition
- In the UK, one in three adults admitted to hospital as an emergency have five or more conditions
- People with multimorbidity have poorer functional status, quality of life, and health outcomes, and are higher users of ambulatory and inpatient care than are those without multimorbidity. Also higher mortality
- This all poses a significant problem for health systems
- **But guidelines only focus on single conditions!**

Junior doctors

“As a junior doctor treating a patient’s acute condition as well as their comorbidities is extremely difficult,

I don’t want to do something that makes something else worse.”



Often forgotten or overlooked



Comorbidities management is complicated and difficult



Lacking confidence in decision making





Senior clinicians

“As a senior doctor, I need to be sure my junior doctors are managing acute conditions and comorbidities correctly.”

X

Juniors often forget to consider comorbidities



Lack time to answer questions



Clear guidance or expert opinion isn't available

Healthcare provider

“As a healthcare provider, I need my healthcare professionals to manage a patient’s comorbidities correctly to reduce length of stay, avoid readmissions and improve quality.”



Avoidable readmissions



Longer length of stay for patients



Increased and unwarranted costs

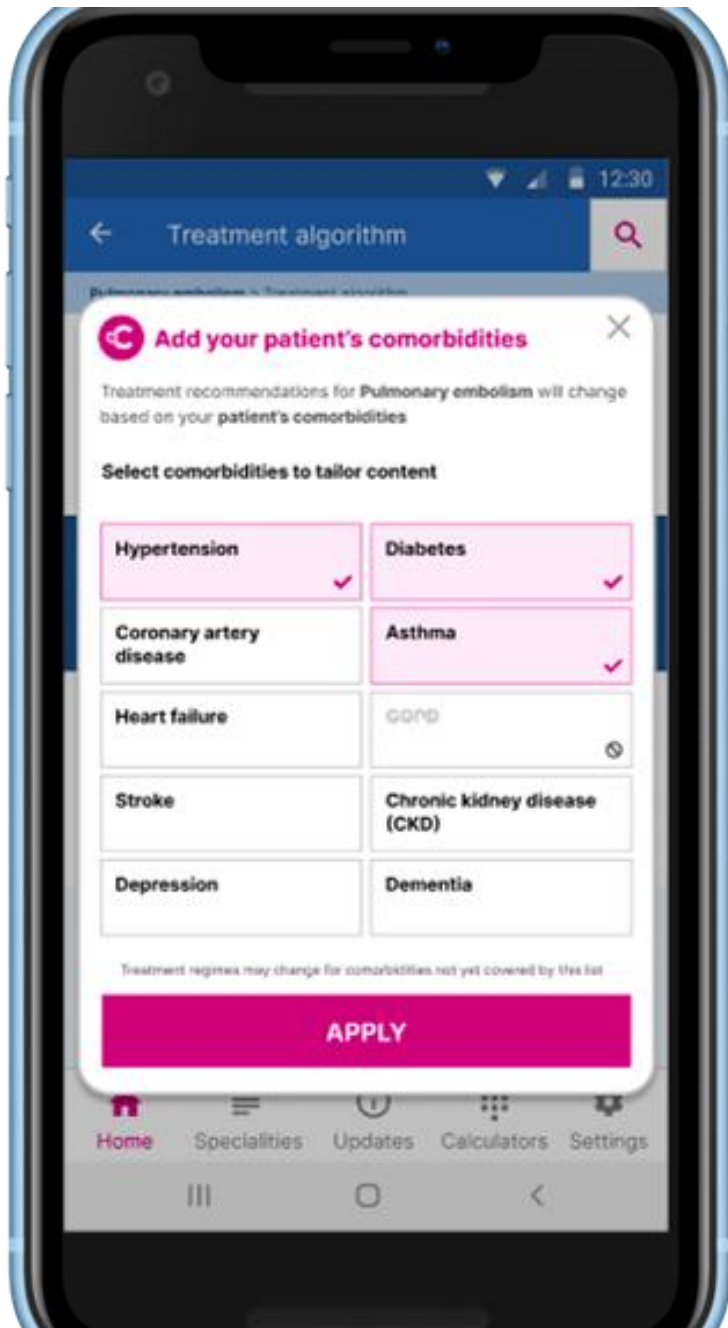


BMJ Best Practice Comorbidities

Add the patient's comorbidities to an existing management plan and get a tailored plan instantly.

Supports healthcare professionals to treat the whole patient when managing acute conditions.

Treat with confidence to improve patient outcomes.



+ Combinations

512
combinations per topic

+ Add your patient's comorbidities

Treatment recommendations for Pulmonary embolism will change dependent on your patient's comorbidities

Select comorbidities

<input type="checkbox"/> Hypertension	<input type="checkbox"/> Diabetes
<input type="checkbox"/> Coronary artery disease	<input type="checkbox"/> Asthma
<input type="checkbox"/> Heart failure	<input type="checkbox"/> COPD
<input type="checkbox"/> Stroke	<input type="checkbox"/> Chronic kidney disease (CKD)
<input type="checkbox"/> Depression	<input type="checkbox"/> Dementia

Please remember that treatment regimes may change for comorbidities not yet covered by this list.

CLOSE

25,600
across 50 topics

7,680
at launch

The only CDS tool
designed to address
comorbidities

Clinical Scenario



Patient presents

An 82-year-old man comes to the Emergency Department on Friday evening with cough and shortness of breath.

He is coughing up green, purulent sputum. These symptoms have been going on for three days and are getting worse.

The patient has a history of COPD and is an ex-smoker. He also has type 2 diabetes which is controlled on diet and metformin.

On examination, he has wheezes and crackles throughout his chest. He normally takes salmeterol one puff twice daily and salbutamol one puff as required.

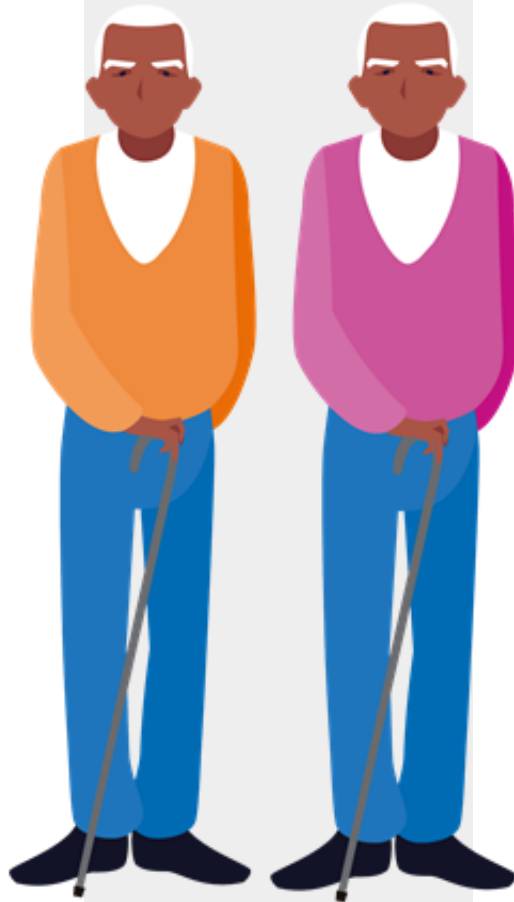
Clinical scenario A (doctor is using a guideline that deals with single conditions only)

COPD managed correctly but diabetes missed
Standard treatment given for an infective exacerbation of COPD.

This includes

- short-acting bronchodilator
- systemic corticosteroid
- oxygen
- antibiotic therapy

No monitoring or management of patient's diabetes.



Clinical scenario B (CM tool used)

COPD and diabetes managed correctly
Treatment given for an infective exacerbation of COPD. His diabetes is actively managed.

This includes

- short-acting bronchodilator
- systemic corticosteroid – but with careful monitoring in light of his comorbidity
- oxygen
- antibiotic therapy

In light of his diabetes, the doctor also

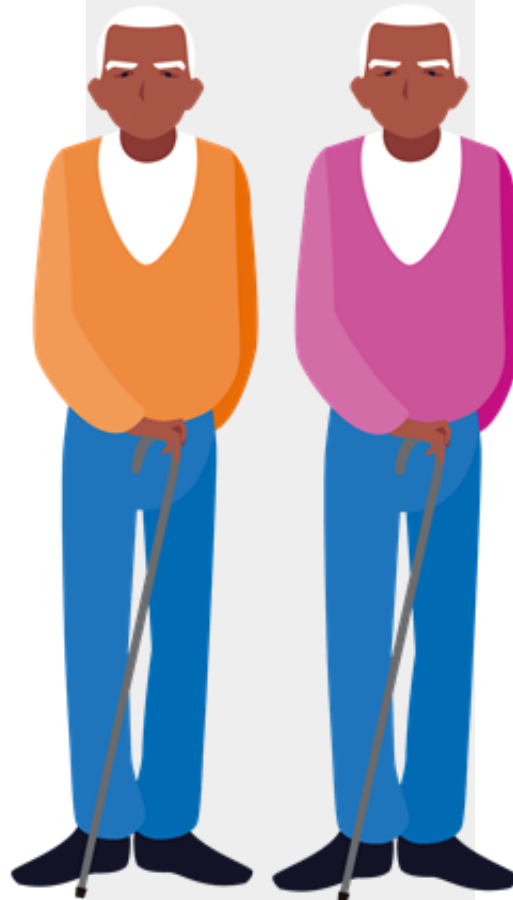
- reviews his diabetes medication
- monitors and manages his blood glucose during the hospital admission
- checks the patient's feet

Clinical scenario A (doctor is using a guideline that deals with single conditions only)

COPD managed correctly but diabetes missed

Standard treatment given for an infective exacerbation of COPD. No monitoring or management of patient's diabetes.

- ✗ **No careful management of his diabetes** when taking corticosteroids
- ✗ **No regular blood glucose checks**
Develops hyperglycemia and renal impairment
- ✗ **No review of his diabetes medication**
Metformin not reviewed & he is likely to need insulin – this does not happen. The patient should stop the metformin as he is developing significant renal impairment.
- ✗ **No check of the patient's feet**
Develops a small pressure ulcer on his left heel



Scenario B (CM tool used)

COPD and diabetes managed correctly

The patient receives appropriate treatment for his COPD – he starts to improve, and his diabetes remains well controlled.

- ✓ **Careful management of his diabetes** when taking corticosteroids
- ✓ **Diabetes medication reviewed**
Metformin stopped and patient given insulin
- ✓ **Systemic corticosteroid administered**
Careful monitoring in light of his comorbidity
- ✓ **Monitoring and management of his blood glucose during the hospital admission**
- ✓ **Patient's feet checked**
Measures taken to prevent pressure ulcers occurring

Clinical scenario A (doctor is using a guideline that deals with single conditions only)

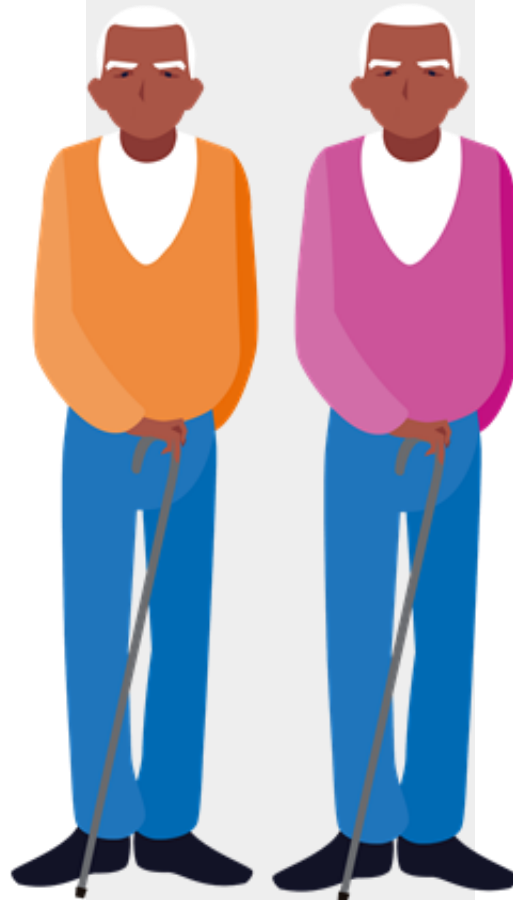
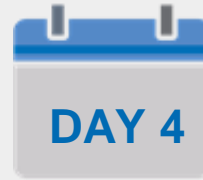
COPD managed correctly but diabetes missed

He is now seriously unwell - with uncontrolled diabetes, renal impairment and a pressure ulcer

He is admitted to the high dependency unit.

Here he receives corrective treatment for

- COPD
- hyperglycemia
- renal impairment
- pressure ulcer



Scenario B (CM tool used)

COPD and diabetes managed correctly

The patient's COPD has now improved.

His diabetes remains well controlled.

The hospital plans to discharge him within 48 hours.

Clinical scenario A (doctor is using a guideline that deals with single conditions only)

COPD managed correctly but diabetes missed

Corrective treatment in progress on HDU

The patient has now stabilised

COPD has improved

Blood glucose and renal function are slowly returning to normal

He still has a small pressure ulcer.

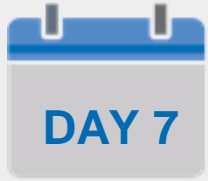


Scenario B (CM tool used)

COPD and diabetes managed correctly

The patient goes home





Clinical scenario A (doctor is using a guideline that deals with single conditions only)

COPD managed correctly but diabetes missed

The patient returns to the main ward.

He continues to receive treatment and close monitoring of his COPD and diabetes as he continues to recover.



Clinical scenario A (doctor is using a guideline that deals with single conditions only)

COPD managed correctly but diabetes missed

The patient goes home





Clinical scenario A (doctor is using a CDS tool that deals with single conditions only)

COPD managed correctly but diabetes missed

The patient goes home



The extra cost associated with his prolonged length of stay would be

$$£413 \times 3 = £1,239$$

$$£857 \times 3 = £2,571$$

The total extra cost would thus be **£3,810 (4425 EU)**

How common is this problem?

- Diabetes is a comorbid condition in 10-20% of patients with COPD.^(1 2)
- In Ireland, 380,000 people are living with COPD ⁽³⁾



Which is a lot of £3,810's

Remember - this is just one comorbidity added to one condition

References

1. Parappil A, Depczynski B, Collett P, Marks GB. Effect of comorbid diabetes on length of stay and risk of death in patients admitted with acute exacerbations of COPD. *Respirology*. 2010 Aug;15(6):918-22.

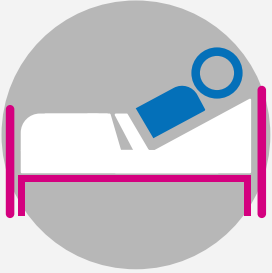
2. Miller J, Edwards LD, Agustí A, Bakke P, Calverley PM, Celli B, Coxson HO, Crim C, Lomas DA, Miller BE, Rennard 3.

<https://www.hse.ie/eng/about/who/cspd/ncps/copd/about/#:~:text=In%202016%20Ireland%20was%20noted,yet%20only%20110%2C000%20are%20diagnosed.>

Clinical scenario - COVID-19



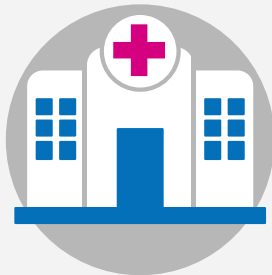
Heart failure + Depression



25% of patients with severe COVID-19 have a history of heart failure.¹



COVID-19 has been associated with depression among survivors. Previous coronavirus outbreaks have been associated with depression in up to **15% of patients.**^{2,3}



Over 255,000 patients with COVID-19 in the RoI so far (May 2021).

Comorbidities in Ireland

Of the 791 individuals reporting doctor-diagnosed CVD, 77% had additional morbidities. High levels of cholesterol and hypertension are well-documented risk factors for CVD and this is usually controlled with medication and were therefore classed as CVD-related comorbidities. However, 11% and 11% of participants with CVD reported having been doctor diagnosed with diabetes and osteoarthritis, respectively. These results indicate that for individuals with CVD non-vascular comorbidities are important use drivers as vascular comorbidities. (1)

Over one-fifth of people with T2DM in Irish general practice are prescribed an antidepressant or benzodiazepine medication. Prescription of these is associated with increased healthcare utilization (2)

The analysis presented supports evidence that multimorbidity is now the norm rather than the exception for ageing adults. We found that the population weighted prevalence of multi-morbidity in our population representative sample of 6,101 Irish adults aged 50+ was 73.25% which confirms the assertion that multi-morbidity in older adults is a problem with high prevalence and a serious issue that needs to be addressed. (3)

1. Morrissey K. Comorbidity and healthcare use for individuals with CVD in the Ireland: a cross-sectional, population-based study. *BMJ Open*. 2019 Jan 15;9(1):e025305. doi: 10.1136/bmjopen-2018-025305. PMID: 30647048; PMCID: PMC6340414.

2. Keating P, O'Connor R, O'Doherty J, Hannigan A, Cullen W, Hickey L, Harnett A, Meagher D, O'Regan A. Prescription of psychotropic medication in patients with type two diabetes mellitus: A multi-practice study from Ireland. *Eur J Gen Pract*. 2019 Jul;25(3):157-163.

3. Hernández B, Reilly RB, Kenny RA. Investigation of multimorbidity and prevalent disease combinations in older Irish adults using network analysis and association rules. *Sci Rep*. 2019 Oct 10;9(1):14567.

Comorbidities and quality of care

- What matters to you
- Team based care (interdisciplinary and prioritisation)
- Communication skills

Comorbidities

- Challenges to guidelines
- Challenges to quality improvement
 - Measurement
 - Intervention
 - Ongoing measurement

Quality care and quality improvement

Middle-aged lady with background of previous duodenal ulcer, anxiety. Admitted with 1/52 rest chest pain with inferior T wave changes, Troponin elevation. Also had new coffee-ground vomit, meleana, Glasgow-Blatchford Score 3. I used the Co-Morbidities tool to review treatment of “Peptic Ulcer Disease” in the context of “Coronary Artery Disease”. I treated her acute coronary syndrome with single antiplatelet therapy (aspirin) on the advice of the tool, with close monitoring of bloods.

The tool was very useful in this lady mentioned, where a difficult decision had to be made regarding safe anti-platelet therapy for her acute coronary syndrome but also in the presence of suspected GI bleeding (although she was haemodynamically stable with no significant drop in her serum haemoglobin). The tool helped me rationalise my choice of agent.

The tool helped me with a difficult decision when treating two acute pathologies, with both thrombosis and bleeding risk.

Quality care and quality improvement

Severe COVID-19 infection with a background of Heart Failure (LVEF <40%) and CKD 4, reviewed on post-take following EAU overnight clerking.

It helped me to consider the co-morbidities instead of having tunnel-vision towards the acute disease process. His systolic blood pressure was 88, however looking back in clinic letters this was his norm and I was able to stop the IVT he had running. This improved our care as the fluid may have worsened the situation if left to continue.

Furthermore, it made me consider factor Xa levels as he was on higher dose prophylactic LMWH. The level was in range, however it is important to consider monitoring this.

It improved the safety of the medical care he was receiving.

“It improved the safety of the medical care he was receiving”: an impact evaluation of BMJ Best Practice Comorbidities in the management of patients with multiple conditions

We asked a cohort of junior doctors to use the BMJ Best Practice Comorbidities tool in their actual clinical practice. We then asked them to fill in a simple questionnaire outlining what difference, if any, the tool made to their practice. The evaluation showed that BMJ Best Practice Comorbidities is effective at helping junior doctors to improve the care that they provide to patients with multiple conditions and that it does have an impact on patient care. When it doesn't change practice, it can still have an effect by reassuring junior doctors that their practice is correct.

Evaluation of BMJ Best Practice Comorbidities in the management of patients with multiple conditions - impact on healthcare professionals

“The tool was very useful in this lady mentioned, where a difficult decision had to be made regarding safe anti-platelet therapy for her acute coronary syndrome but also in the presence of suspected GI [gastrointestinal] bleeding (although she was haemodynamically stable with no significant drop in her serum haemoglobin). The tool helped me rationalise my choice of agent.”

Specialty Doctor in Acute Medicine

“It helped me to consider the co-morbidities instead of having tunnel-vision towards the acute disease process.” “His systolic blood pressure was 88, however looking back in clinic letters this was his norm and I was able to stop the IVT he had running.” “This improved our care as the fluid may have worsened the situation if left to continue.”

Junior doctor / resident

“It was very useful to have the different options for managing stable and unstable patients, putting into context all the different comorbidities that needed to be addressed.”

Internal Medicine Trainee

“While I was confident of the management of his co-morbidities, the tool helped to maintain a holistic approach to his care.”

Specialty Doctor in Acute Medicine

“A good reminder to review asthma medications and ensure optimal medications; additionally there was a prompt to review the patient’s mental health which was useful (depression), particularly when substance misuse was involved.”

Junior doctor / resident

“The treatment algorithm with the co-morbidities app showed the importance of early input from the diabetic team, especially as the patient was nil by mouth.”

Surgical Trainee / resident

“A good reminder to review diabetic management and we consequently involved the diabetic specialist nurses to ensure optimum management of the patient.”

Junior doctor / resident

Evaluation of BMJ Best Practice Comorbidities in the management of patients with multiple conditions - impact on patients

“It improved the safety of the medical care he was receiving.”

Junior doctor / resident

“Allowed a more patient-centred approach and encouraged exploration of patient wishes.”

Junior doctor / resident

“This will help shorten the hospital stay of the patient.”

Surgeon in Training / resident

“Ensured that the patient did not have diabetic-related complications and allowed the team to be more aware of the management.”

Junior doctor / resident

“Following the guidance on the treatment of the acute condition alongside the pre-existing comorbidities, the team was able to get a definite plan from day 0 and the patient was immediately allocated to the most appropriate ward, thus improving the quality of care, shortening the hospital stay and having a better experience overall.”

Senior House Officer / resident

Patient involvement

“Healthcare professionals will use medical knowledge resources to ensure that they make decisions based on the best available evidence. However all decisions should be shared with patients and patients can only take part in shared decision making when they are fully informed about the options that are open to them.”

“A final note to healthcare professionals doing their best day to day: take the time to have that next important discussion with patients and build high-quality and impactful relationships with them. Not only are you setting the foundation for shared decision making, you are also supporting the patient’s journey to better health.”

“BMJ Best Practice should give answers quickly and this time efficiency should in turn give healthcare professionals more time to reflect and act upon these issues.”

BMJ Best Practice

Search c

[DEMONSTRATION](#)



Try the new Comorbidities tool ^x

Add your patients' comorbidities and get an instant, tailored management plan.



Recent updates



Specialties



Calculators



Comorbidities



Patient leaflets



Procedural videos



Evidence

Best Practice app

Important updates

Comorbidities o

BMJ Best Practice - Comorbidities

- Stop and **think** – engage clinicians
- Single diseases vs comorbidities
- Improve quality of patient care, ensure patient safety, drive patient centred care, avoid complications, save costs

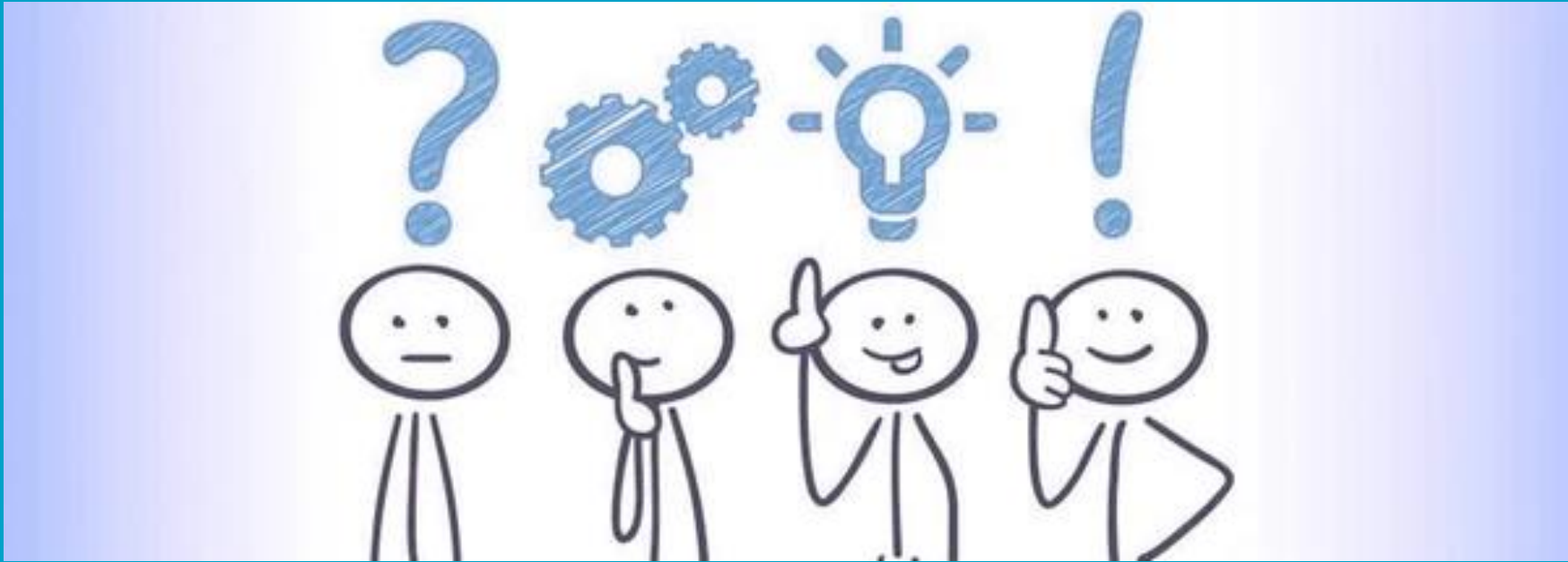
+ Comorbidities Tool



Treating the whole patient

kmwalsh@bmj.com

BMJ Best Practice



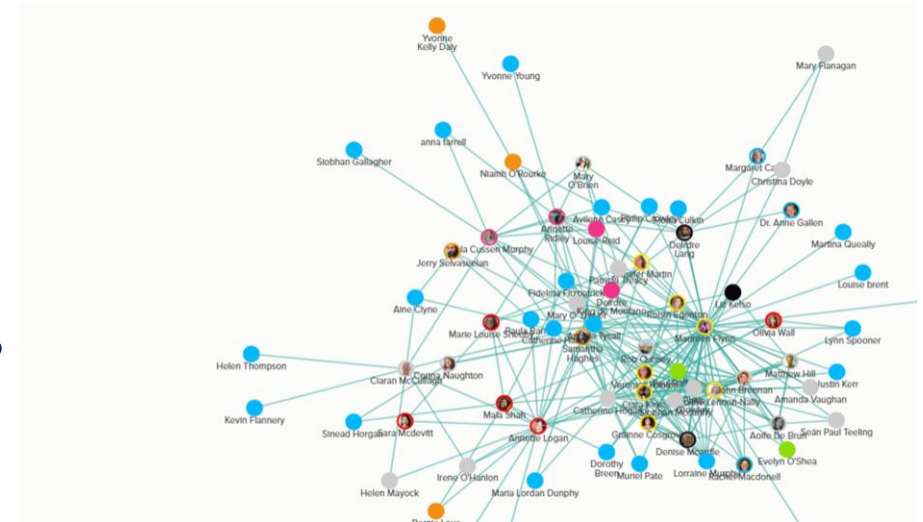
CONVERSATION



The Q Ireland Network Map

To help build connections between those involved in healthcare quality improvement across Ireland

- How to join the map?
 - Visit the HSE website (see link in the chat)
 - Get sent your unique link to the map
 - Enter information about you, your professional characteristics and your interests
 - Log your connections
- How to use the map?
 - Filter the map by role, organisation, interests
 - View individual profiles
 - Connect and collaborate with others





A connected community working together to improve health and care quality across the UK and Ireland

Delivered by



- All you need to know about applying can be found on the Q website
- You will be invited to complete an online application using the Q online portal
- If you have queries or require support, please contact our colleague via email

Caroline.Lennonnally@hse.ie

CHAMPION PARTNER ENABLE DEMONSTRATE www.qualityimprovement.ie @NationalQPS



Upcoming Webinars: Dates for your diary

Dates	Topics	Speakers
2 November	QI and Large Scale Change – Reflections of the Deteriorating Patient Improvement Programme	Avilene Casey - Programme Lead, Office of the Chief Clinical Officer and ONMSD
16 November	TBC	

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<https://www.hse.ie/eng/about/who/qid/resourcespublications/qitalktime.html>

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Let us know how we did today



Reminder: Short questions (pop up) as you sign off, please help us to improve our QPS Talktime Webinars by sharing your feedback

We really appreciate your time, thank you

*Thank
you*

