









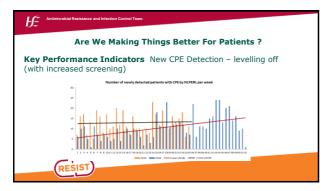
| HE Antimicrobial Resistance and Infection Control Team |
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| Better Capacity for IPC and AMS in HSE |
| Building Capacity in HSE |
| 87 new posts for AMRIC since start of 2018 |
| Community |
| IPC DON & 9 ADON |
| AMS Pharmacist Chie & 9 Senior Pharmacists |
| Acute Operations |
| 27 Medical scientists |
| Plus IPCN's, AMS Pharmacists, Medical Scientists, Admin Officers, |
| Surveillance Scientists, Consultant AMRIC Division of HPSC |
| Consultant, GP, Surveillance scientist, epidemiologist, project manager |
| Consultant, Gr, Surveinance scientist, epidemiologist, project manager |
| DESIST |
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| Better Structures in HSE | | |
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| Making Things Happen - National AMRIC Division of HPSC - clinical expertise & surveillance | | _ |
| Performance monitoring – Business Intelligence Unit Getting Things Done – HSE AMRIC Implementation Team | | |
| Authority to do things- HSE AMRIC Oversight Team | | _ |
| Hospital Group & CHO | | _ |
| IPC Committees | | |
| National Support - Where to go with questions ? "One stop shop" AMRIC Division of HPSC | | _ |
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| HE Antimicrobial Resistance and Infection Control Team | 1 | |
| <i>Bz</i> | | _ |
| Are We Making Things Better For Patients ? | | |
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Are We Making Things Better For Patients? Key Performance Indicators Hospital acquired *S. aureus* blood stream infection National Target is to keep less that 1 per 10 000 bed days Rate generally less that 1 / 10 000 bed days But stable and why? Intravascular devices are a big part of the problem

| Antimicrobial Resistance and Infection Control Team | |
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| Are We Making Things Better For Patients ? Key Performance Indicators | |
| Hospital acquired <i>C. difficile</i> Infection (CDI) | |
| National Target is to keep less that 2 per 10 000 bed days | |
| Rate generally above 2 and has exceeded 3 in 2 of 3 recent months | |
| Why ? Antimicrobial use is a big factor Person-to-person spread in hospital is at least part of the problem | |
| (probably quite significant also) | |

Are We Making Things Better For Patients? Key Performance Indicators Carbapenemase Producing Enterobacterales (CPE) related KPIs CPE screening – more than 27 000 CPE screens performed in July 2019 (about 10 000 per month start of 2018)

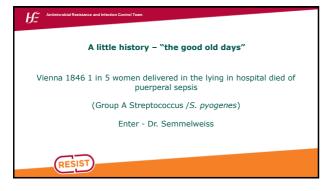


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| Are We Making Things Better For Patients? | |
| Acquiring CPE in Hospital | |
| Person to person spread (direct & indirect) Finding people who are positive, appropriate placement and precautions | |
| Environment Reservoirs in the hospital environment (coming up out of the drains) | |
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| Are We Making Things Better For Patients? | |
| CPE Control is better but there is a lot to do | |
| Hospital acquired $\emph{S. aureus}$ blood stream infection – stable but we need to make it better | |
| Hospital acquired <i>C. difficile</i> infection – rates persistently above target and have increased this year – a lot to do on infection control and | |
| stewardship | |
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| 1) Antimicrobial Resistance and Infection Control Team |
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| Recognising the successes as well as monitoring what goes wrong |
| We estimate that about 650 to 700 people will get CPE in hospitals in Ireland this year - tens of thousands will not - because IPC works |
| We estimate that about 350 people will get <i>S. aureus</i> blood stream infection in HSE hospitals this year – tens of thousands will not – because IPC works |
| We estimated that 700-1000 people will get <i>C. difficile</i> infection in HSE hospitals this year – tens of thousands will not – because IPC and AMS works |
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| Antimicrobial Resistance and Infection Control Team | |
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| One of the biggest challenges for people working in IPC & AMS | |
| When it works best it looks like nothing happened | |
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| HE Antimicrobial Resistance and Infection Control Team |
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| A little history – moving on 140 years |
| Galway 1986 – The new (and very nervous) Dr. Cormican |
| A lot of the "then" in patients would probably be todays out patients |
| A lot of "todays" in patients would probably already be deceased in 1986 |
| |
| RESIST |

A little history – moving on 140 years Galway 1986 – The new (and very nervous) Dr. Cormican A lot of "then" in patients would probably be todays out patients A lot of "todays" in patients would probably already be deceased in 1986



| 1) Antimicrobial Resistance and Infection Control Team |
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| A little geography – "far away hills" |
| Greece now : more that 50% of <i>Klebsiella pneumoniae</i> blood streasm infections are CPE |
| Italy now: more that 25% of <i>Klebsiella pneumoniae</i> blood stream infections are CPE |
| Outside of Europe: many countries with little or no good information but we find drug resistant bacteria in very high proportion of patients transferred back |
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Healthcare 2019 – IPC has never been harder to assure Hospital Patients have never been so vulnerable There have never been so much intercountry movement for healthcare (medical tourism and repatriation) There have never been so many drug resistant bacteria There have never been less new antibiotics

Healthcare 2019 – The Work You Do

Protects most patients from healthcare associated infection

Protects most hospital patients from colonization with CPE and many other MDRO's

Helps to keep the antibiotics we have working

Is critical to sustainability of safe healthcare services

| HE Antimicrobial Resistance and Infection Control Team |
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| Thank You |
| for keeping the ship of healthcare afloat |
| I am likely to need that ship more in the future than in the past |
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