

20/04/2020





Bijlages
vaststellen en testen bruikbaarheid van IDM-Alert in het zorgnetwerk



EXPERTCENTRUM VOOR MICROBIOLOGIE

1



Het resultaat




Twee onafhankelijke analyse omgevingen



2




Lokale data






Analyse & Reports voorbeelden

enkele provider

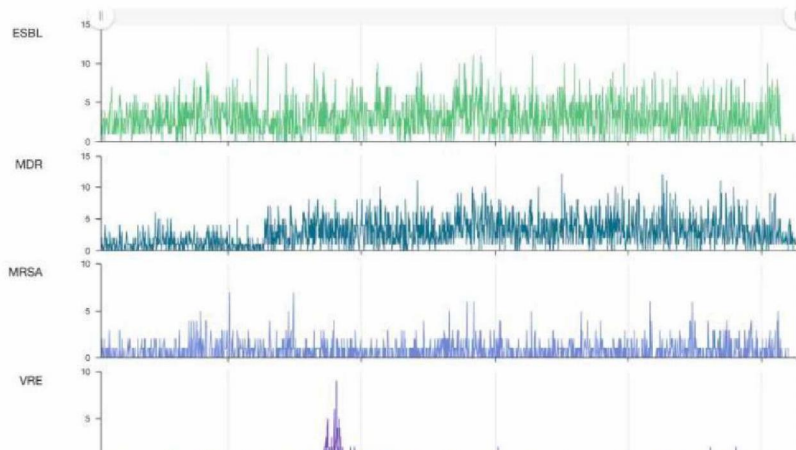
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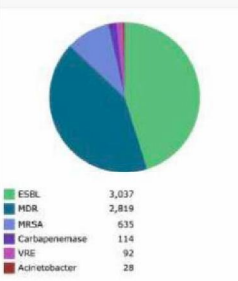
BRMO

MDRO per MDRO type per day (patients count)



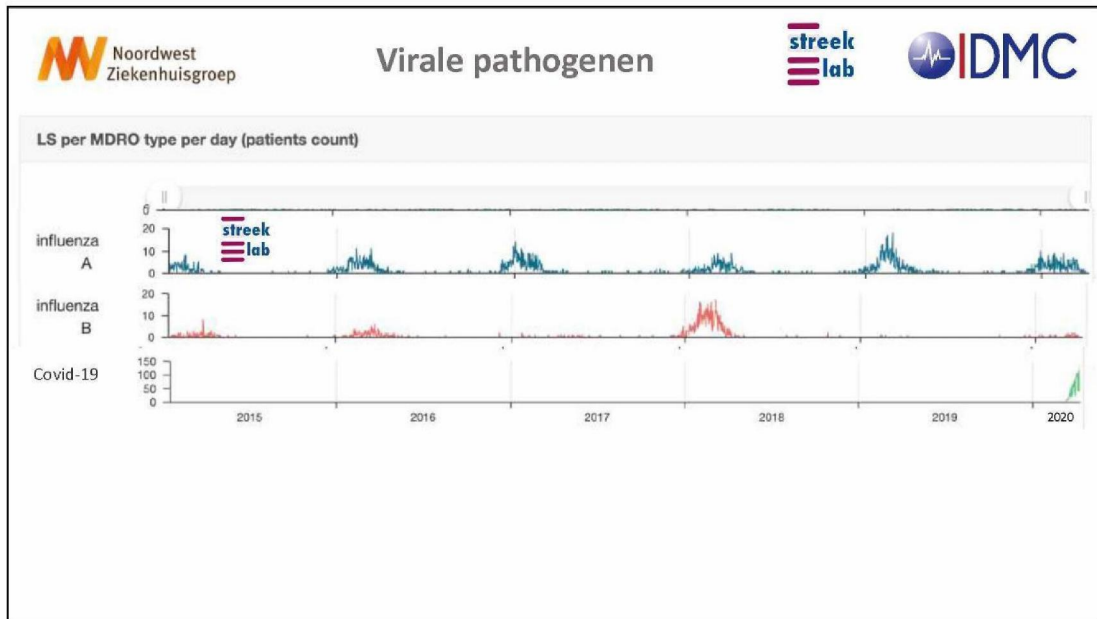
MDRO per specification (patients count)



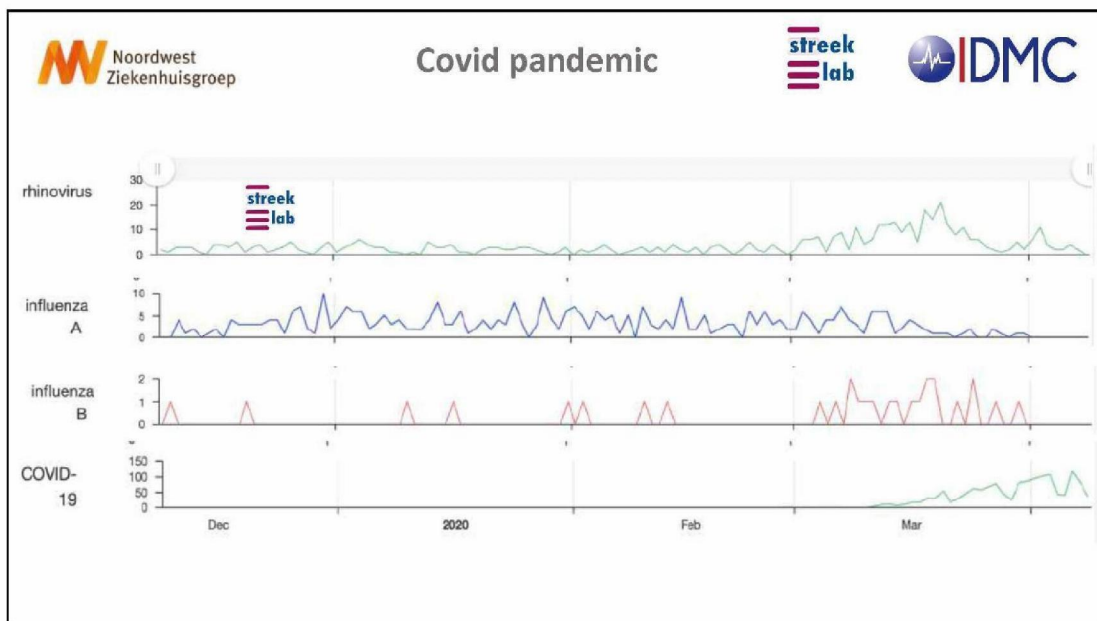
specification	patients
ESBL	3,037
MDR	2,819
MRSA	635
Carbapenemase	114
VRE	92
Acinetobacter	28

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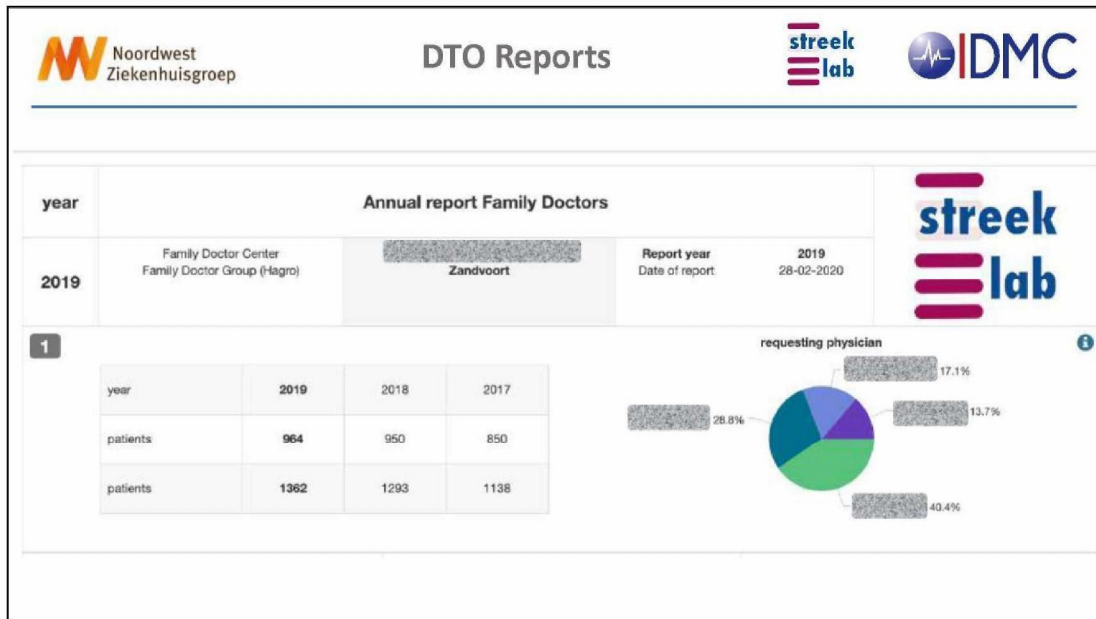
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		Reports					
	Count of isolates	Count of isolates					
		2015	2016	2017	2018	2019	2020
Dientamoeba fragilis	ZHS	434	510	408	373	388	21
	HA	2135	2989	2903	2731	2704	264
	VPH	0	1	2	3	8	1
Giardia lamblia	ZHS	29	32	26	24	31	0
	HA	203	228	284	270	224	11
	VPH	0	0	0	1	0	0
Cryptosporidium	ZHS	9	17	6	2	12	0
	HA	105	201	91	112	91	1
	VPH	0	0	0	0	0	0
		Publish Report		Generate Charts			

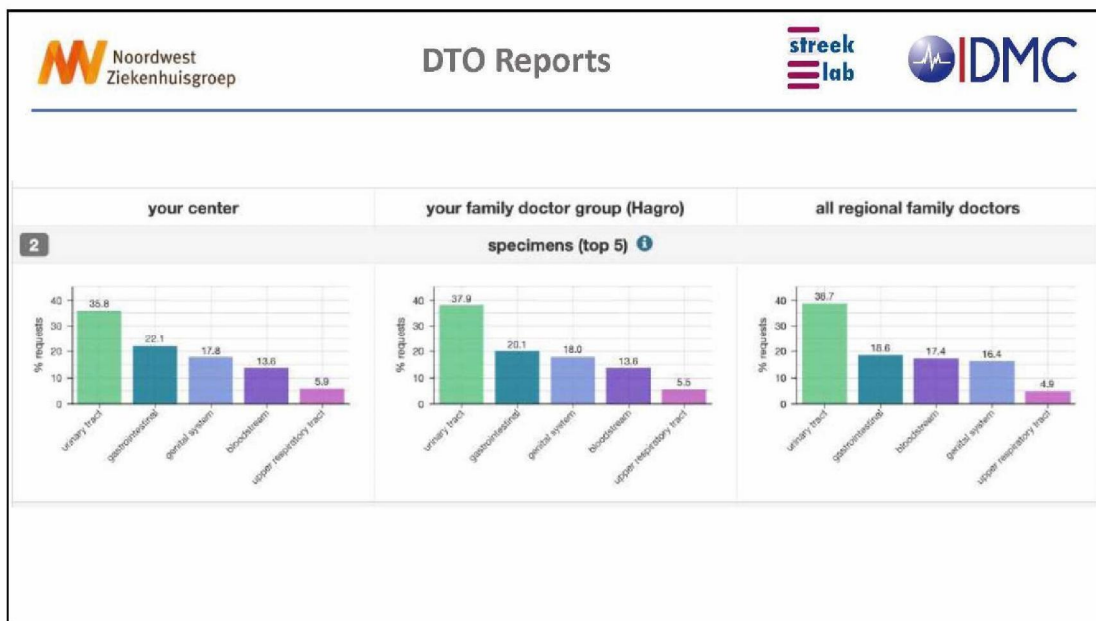
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		Reports											
	Resistance (%)	enterobacteriaceae			Escherichia coli			Klebsiella pneumoniae			Proteus mirabilis		
		2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
amoxicillin/clavulanic acid	ZHS - Urine	33	32	36	33	31	36	15	13	15	7	8	8
	VPH - Urine	42	36	35	43	37	39	23	23	19	8	11	10
	HA - Urine	30	30	32	30	30	32	11	18	17	6	8	5
cotrimoxazole	ZHS - Urine	17	16	16	22	21	20	14	7	7	28	21	27
	VPH - Urine	23	17	16	28	21	20	17	11	8	35	30	28
	HA - Urine	18	17	17	21	20	20	9	11	8	26	24	22
amoxicillin	ZHS - Urine	59	57	60	41	40	43	100	100	100	20	18	22
	VPH - Urine	63	61	63	49	47	47	100	100	100	24	25	22
	HA - Urine	49	48	50	37	36	38	100	100	100	20	22	17
ciprofloxacin	ZHS - Urine	10	13	13	14	16	16	6	9	9	10	12	15
	VPH - Urine	21	22	18	27	25	24	10	13	8	13	23	23
	HA - Urine	8	10	10	9	11	11	5	14	13	5	11	10

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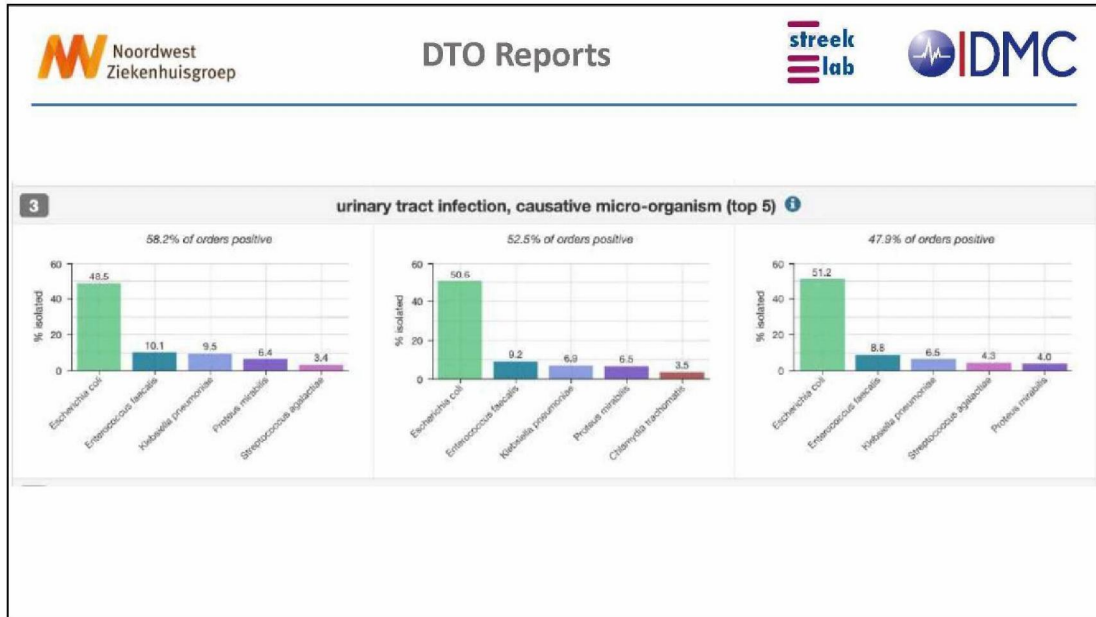


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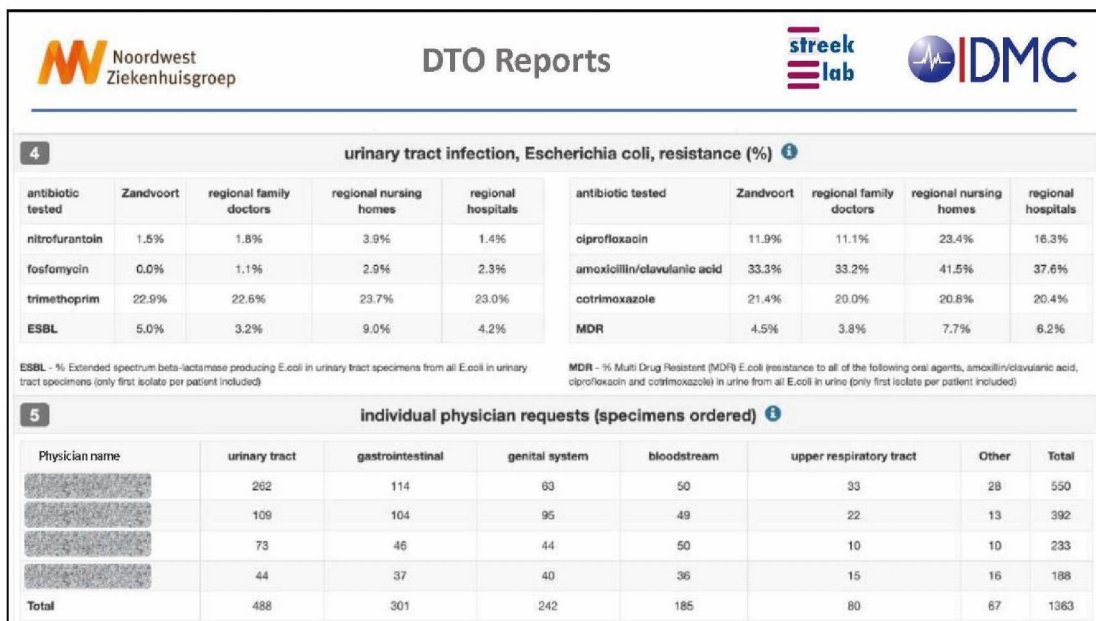


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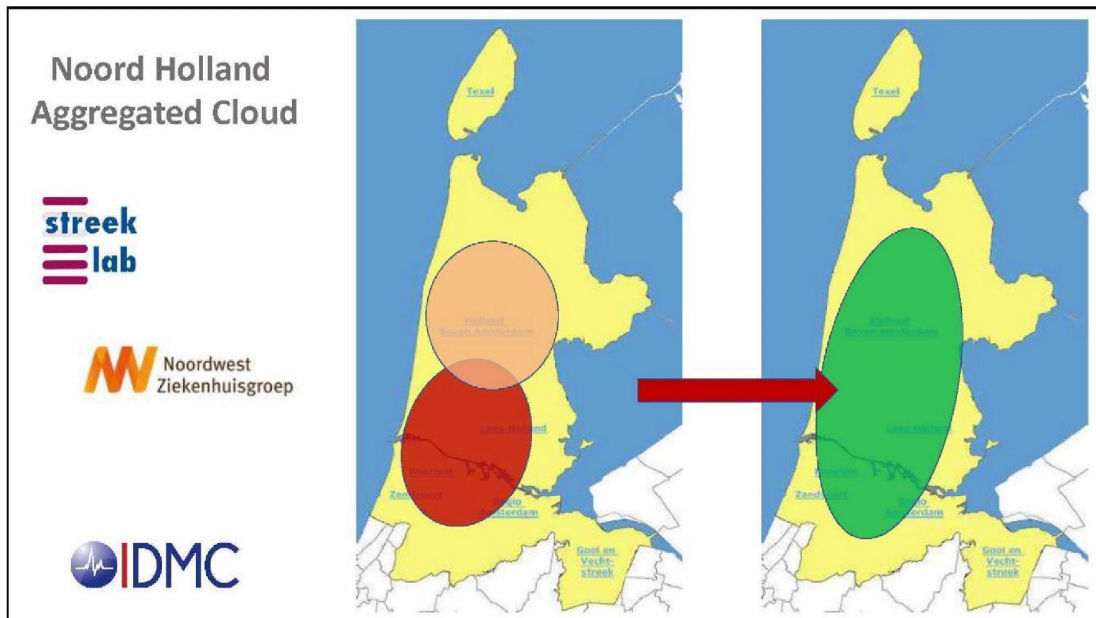


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Patient Name		Patient Identifiers		Patient National Id		Patient Birth Date																					
<div style="display: flex; justify-content: space-between; align-items: center;"> <h2 style="margin: 0;">Details</h2> <div style="text-align: right;"> </div> </div>																											
Order Number		Order Creation Date		Org Name		Org Ward																					
2020-02-26		2020-01-09																									
Specimen Cod.:	Specimen Ana.:	Micro Organism																									
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Antibiotic Class</th> <th>Meropenem</th> <th>Mikofurazon</th> <th>Gentamicin</th> <th>Amoxicillin</th> <th>Piperacilin/Tazobactam</th> <th>Imipenem</th> <th>Oxacillin</th> <th>Colimoxazole</th> <th>Tetracycline</th> <th>Trimethoprim</th> <th>Ciprofloxacin</th> <th>Colistin</th> <th>Fosfomycin</th> <th>Clindamidine</th> <th>Cefazolin</th> <th>Cefuroxim</th> <th>Ertapenem</th> <th>Piperacilin</th> <th>Vancomycin</th> </tr> </thead> </table>								Antibiotic Class	Meropenem	Mikofurazon	Gentamicin	Amoxicillin	Piperacilin/Tazobactam	Imipenem	Oxacillin	Colimoxazole	Tetracycline	Trimethoprim	Ciprofloxacin	Colistin	Fosfomycin	Clindamidine	Cefazolin	Cefuroxim	Ertapenem	Piperacilin	Vancomycin
Antibiotic Class	Meropenem	Mikofurazon	Gentamicin	Amoxicillin	Piperacilin/Tazobactam	Imipenem	Oxacillin	Colimoxazole	Tetracycline	Trimethoprim	Ciprofloxacin	Colistin	Fosfomycin	Clindamidine	Cefazolin	Cefuroxim	Ertapenem	Piperacilin	Vancomycin								
ANUS_RECT	gastrointestinal	Proteus mirabilis	S	S	R	S	S	S	S	S	S	S	R	S	S	S	S	S	S								
ANUS_RECT	gastrointestinal	Escherichia coli	S	S	S	R	S	S	S	S	R	R	R	S	S	S	S	S	S								
ANUS_RECT	gastrointestinal	Pseudomonas aeruginosa	S	S	S	S	S	S	S	S	R	S	S	S	S	R	S	S	S								
<div style="display: flex; justify-content: space-between; align-items: center;"> <h2 style="margin: 0;">Details</h2> <div style="text-align: right;"> </div> </div>																											
Order Number		Order Creation Date		Org Name		Org Ward																					
2019-11-14																											
Specimen Cod.:	Specimen Ana.:	Micro Organism																									
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Antibiotic Class	Meropenem	Gentamicin	Piperacilin/Tazobactam	Imipenem	Ceftriaxone	Tetracycline	Ciprofloxacin	Colistin	Ertapenem	Fosfomycin	Clindamidine	Cefazolin															
BRANDWOND	skin and soft tissue	Pseudomonas aeruginosa	S	S	S	S	R	S	S	S	S	R	S	S	S	R	S	S									
BRANDWOND	skin and soft tissue	Achromobacter baumannii	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R									

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W Noordwest Ziekenhuisgroep

Noord Holland Aggregated Cloud Data 2016-2020

streek lab

IDMC

Analyse & Reports voorbeelden

aggregated cloud

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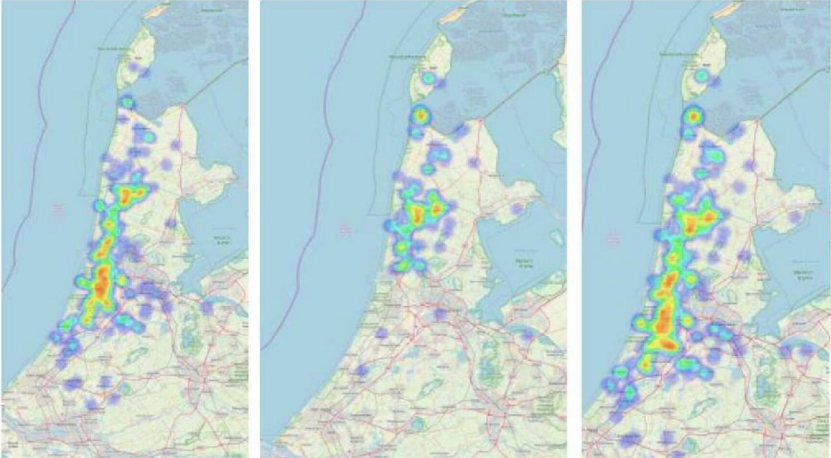
W Noordwest Ziekenhuisgroep

Noord Holland Aggregated Cloud Influenza A patients 2016-2020

streek lab

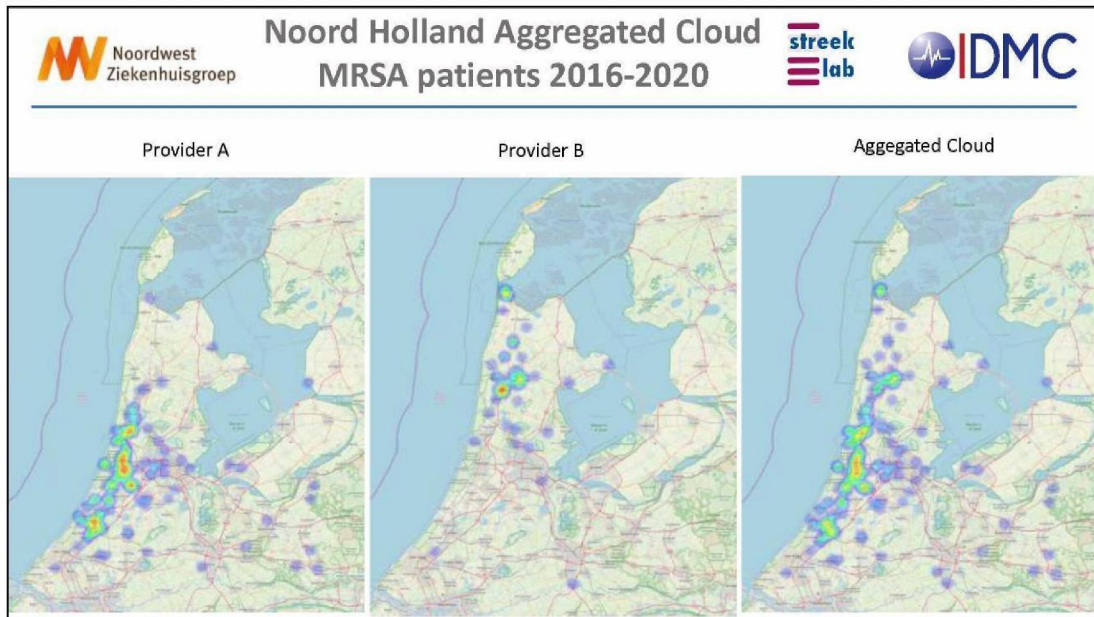
IDMC

Provider A Provider B Aggregated Cloud






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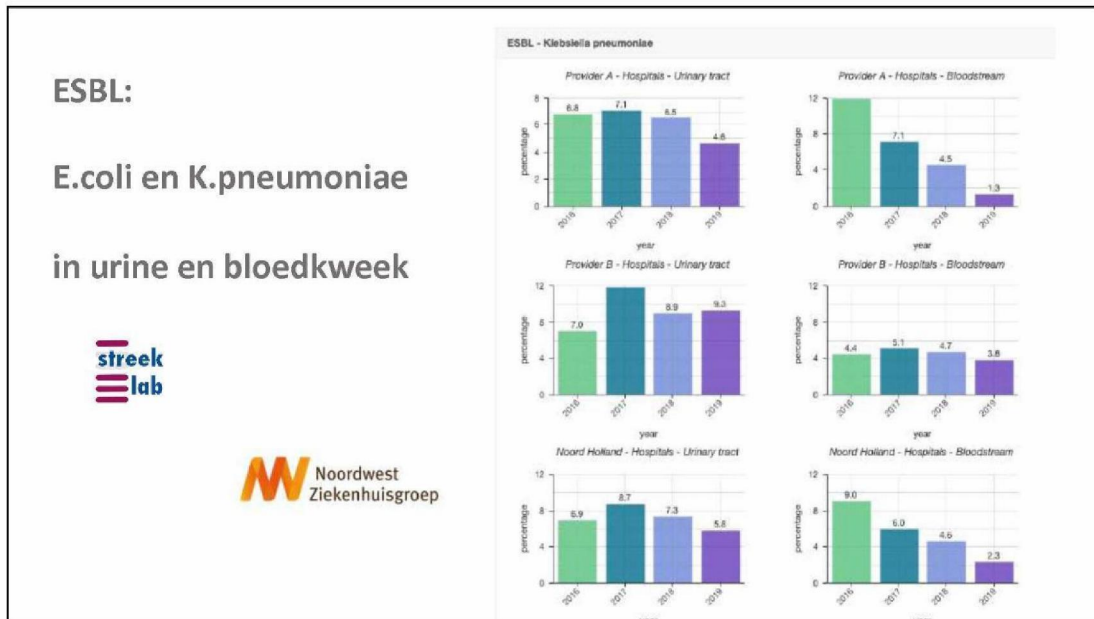

Noord Holland Aggregated Cloud



ESBL: E.coli en K.pneumoniae in urine en bloedkweek

Percentage		Urinary tract				Bloodstream			
		2016	2017	2018	2019	2016	2017	2018	2019
ESBL - Escherichia coli	Provider A - Hospitals	4.3%	4.5%	4.4%	4.9%	9%	6.4%	6.5%	9%
	Provider B - Hospitals	4.6%	4.5%	4.8%	4.3%	4%	3.4%	3.9%	4.5%
	Noord Holland - Hospitals	4.4%	4.5%	4.5%	4.8%	6.8%	5.1%	5.5%	7.4%
ESBL - Klebsiella pneumoniae	Provider A - Hospitals	6.8%	7.1%	6.5%	4.6%	11.9%	7.1%	4.5%	1.3%
	Provider B - Hospitals	7%	11.8%	8.9%	9.3%	4.4%	5.1%	4.7%	3.8%
	Noord Holland - Hospitals	6.9%	8.7%	7.3%	5.8%	9%	6%	4.6%	2.3%
MRSA	Provider A - Hospitals	1.8%	1.7%	0.5%	2.2%	2.8%	1.6%	0	0.3%
	Provider B - Hospitals	0	0	0	0	0	0	0	0
	Noord Holland - Hospitals	1.1%	1.2%	0.3%	1.5%	1.6%	0.8%	0	0.2%

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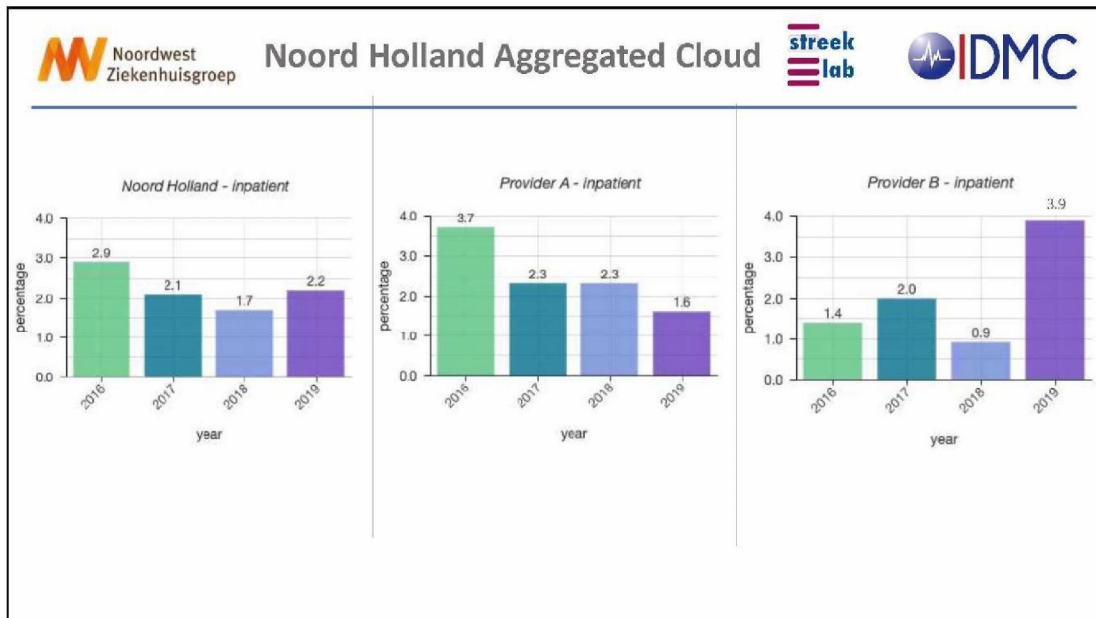
General Wards		Escherichia coli				Klebsiella pneumoniae				Enterobacter cloacae			
		2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
amoxicillin/clavulanic acid	Provider A	25	37	37	38	14	18	19	16				
	Provider B	31	38	39	41	18	21	28	19				
	Noord Holland	27	37	38	39	15	19	23	17				
	Nethmap hospitals	24	35	36	-	13	18	27	-				
piperacillin/tazobactam	Provider A	4	6	6	5	6	10	12	7	12	12	7	-
	Provider B	12	13	12	14	14	18	21	13	-	-	-	-
	Noord Holland	6	9	8	7	8	13	15	8	12	12	7	-
	Nethmap hospitals	5	5	5	-	6	7	9	-	-	-	-	-
cefuroxime	Provider A	10	16	16	17	15	17	14	12				
	Provider B	15	15	14	17	15	19	23	18				
	Noord Holland	12	15	15	17	15	18	18	13				
	Nethmap hospitals	12	13	14	-	15	16	16	-				
cefotaxime	Provider A	6	9	7	10	12	14	10	8				
	Provider B	9	9	8	9	12	14	16	11				
	Noord Holland	7	9	7	10	12	14	12	9				
	Nethmap hospitals	5	6	7	-	9	10	10	-				
ceftazidime	Provider A	5	6	5	10	11	13	8	8				

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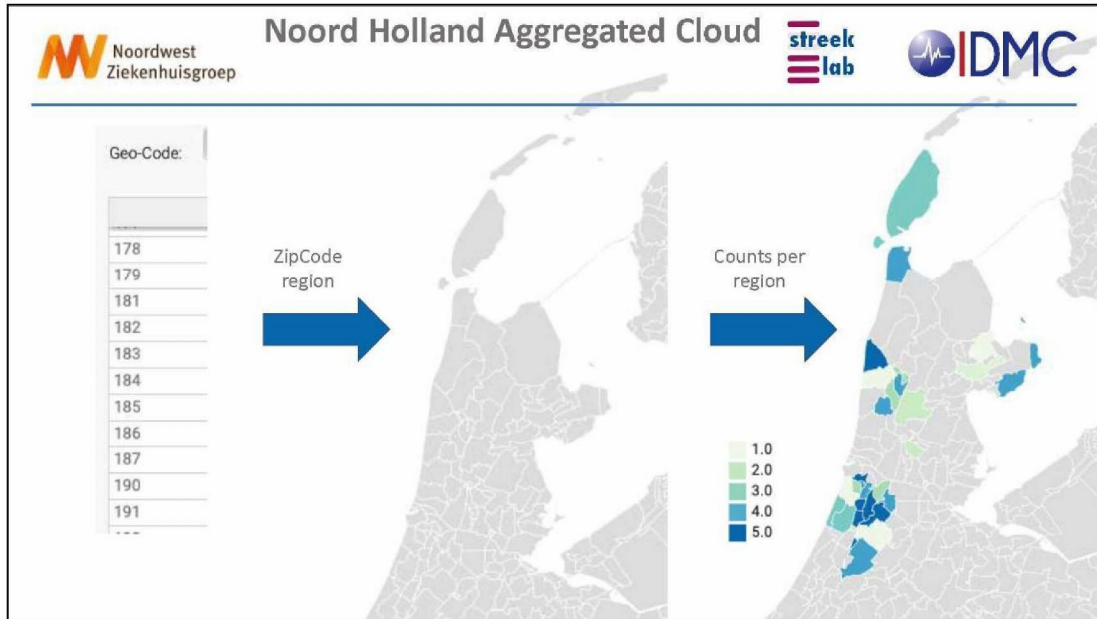
MDRO		inpatient			
		2016	2017	2018	2019
ESBL	Provider A	6.3%	9.2%	7.2%	6.4%
	Provider B	7.2%	6.2%	5.9%	5.1%
	Noord Holland	6.6%	8%	6.7%	6%
MRSA	Provider A	3.7%	2.3%	2.3%	1.6%
	Provider B	1.4%	2%	0.9%	3.9%
	Noord Holland	2.9%	2.1%	1.7%	2.2%
multires. P.aeruginosa	Provider A	9%	12.6%	4.6%	15.5%
	Provider B	2.5%	2.2%	0.6%	4.6%
	Noord Holland	7.2%	8.8%	3.2%	13.6%

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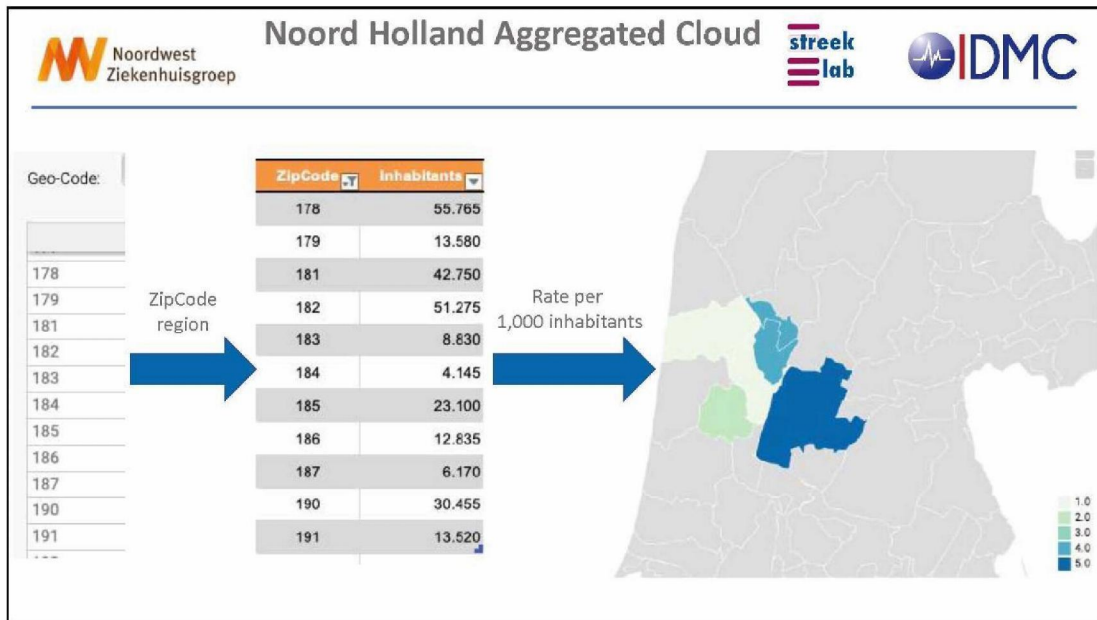


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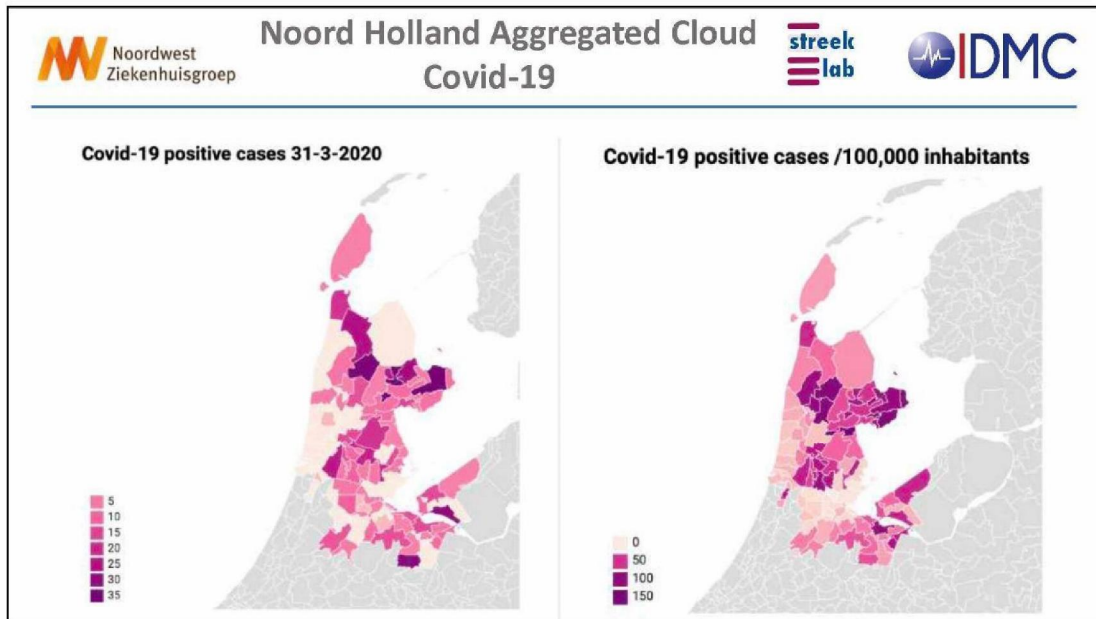


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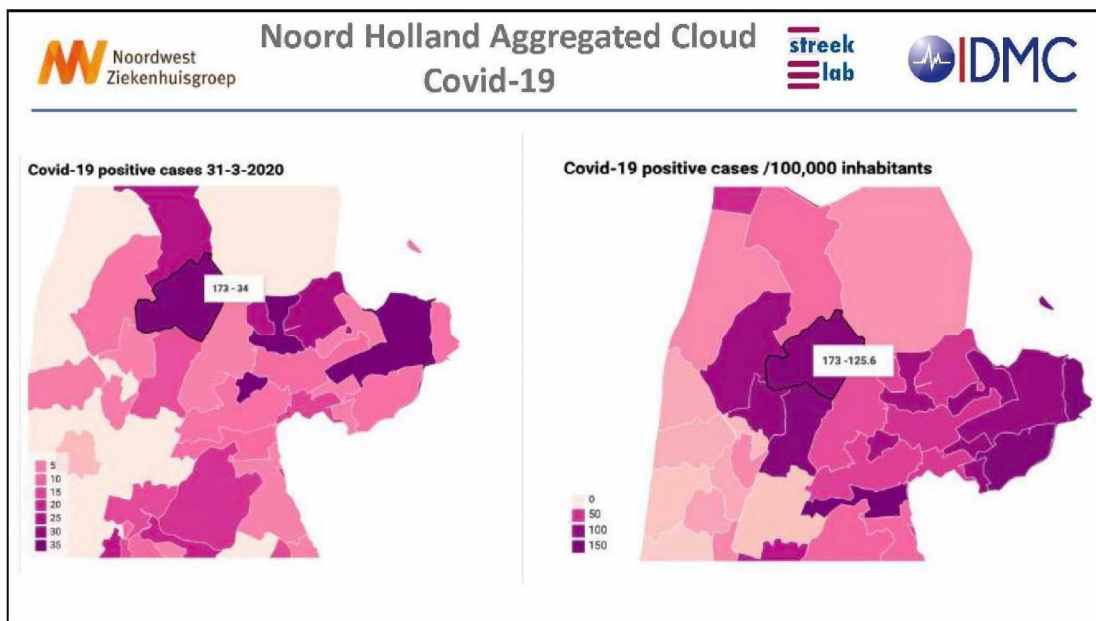


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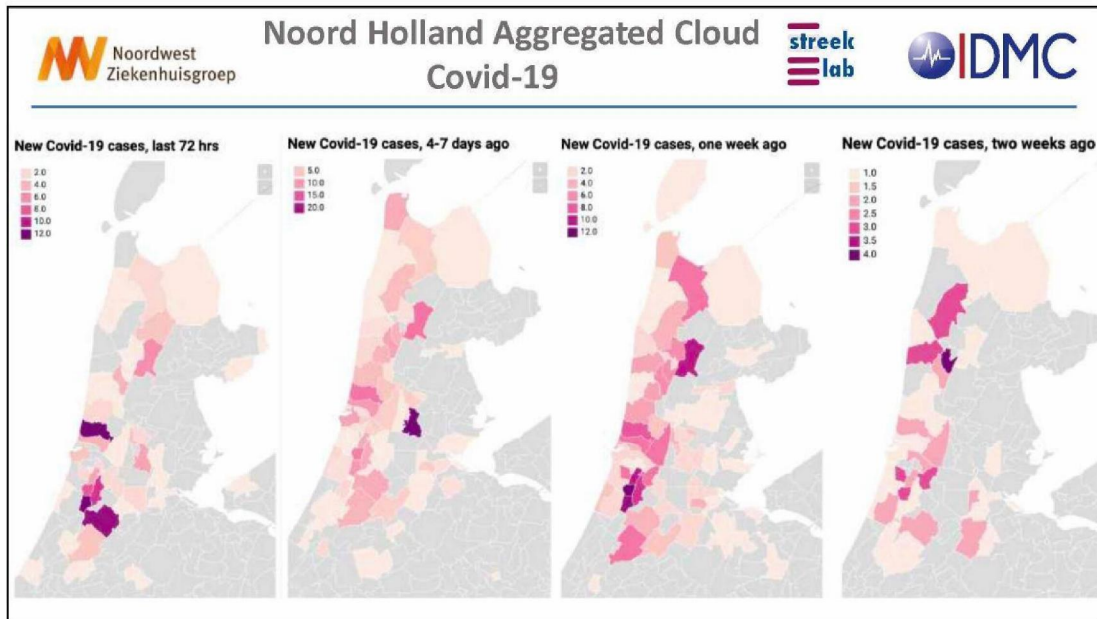


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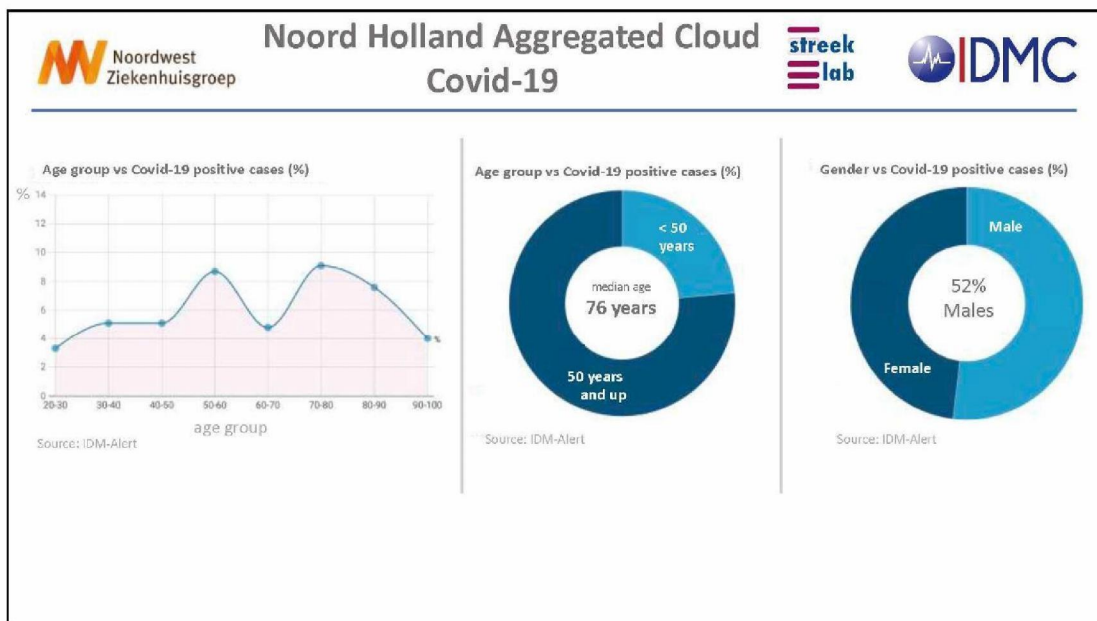


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