

Surveillance of antimicrobial use and development of a surveillance system

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Efforts in 2021

Ongoing **surveillance** of antimicrobial use

- Changes in antimicrobial usage over time based on billing data (2013-2020)
- Changes in data on antimicrobial sales over time (2013-2021)

A **system** to facilitate the proper use of antimicrobials

- A system to facilitate the proper use of antimicrobials in clinics
Monitoring of antimicrobial use in clinics

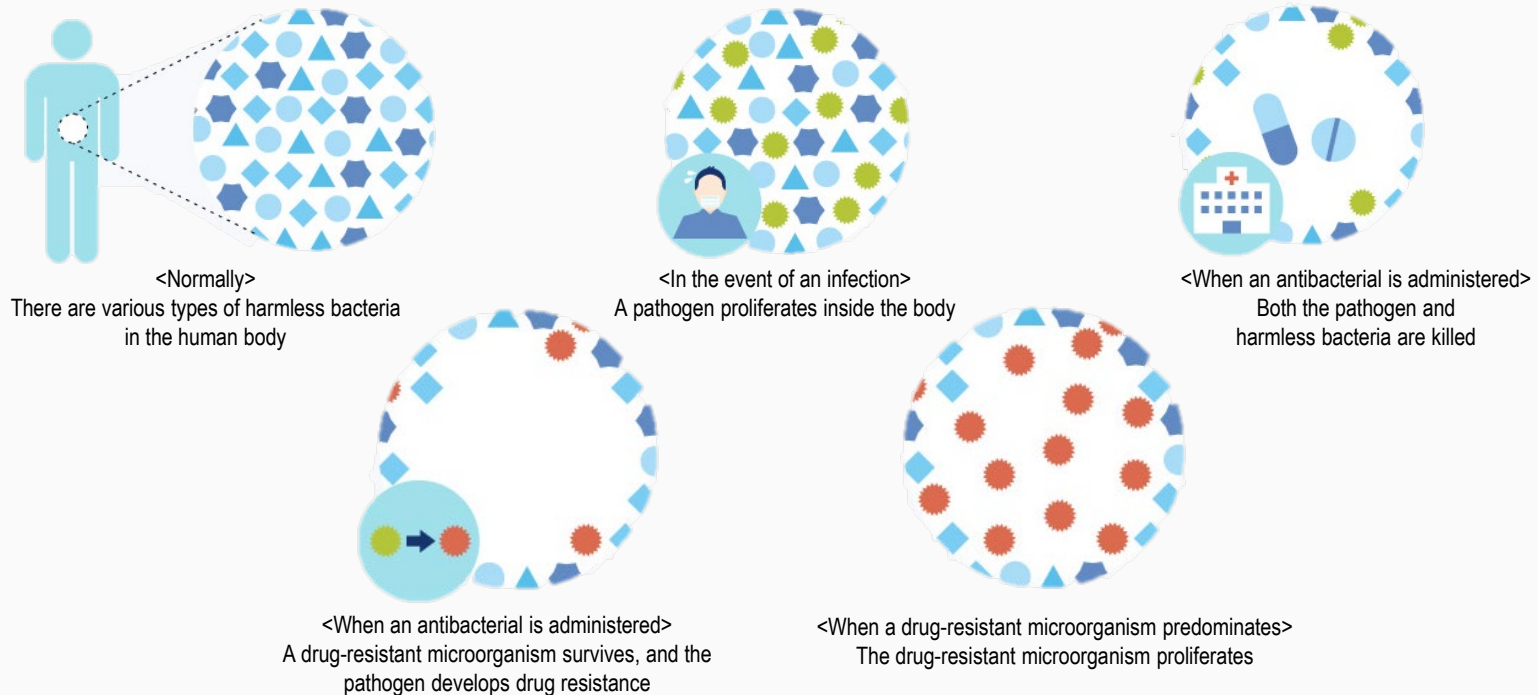
Antimicrobials and antimicrobial resistance (AMR)

Antibacterials are medicines for an illness due to a bacterium, so they are ineffective against an illness due to a virus!



Even though antibacterials are often ineffective against a cold...
Antibacterials are being prescribed for a cold!

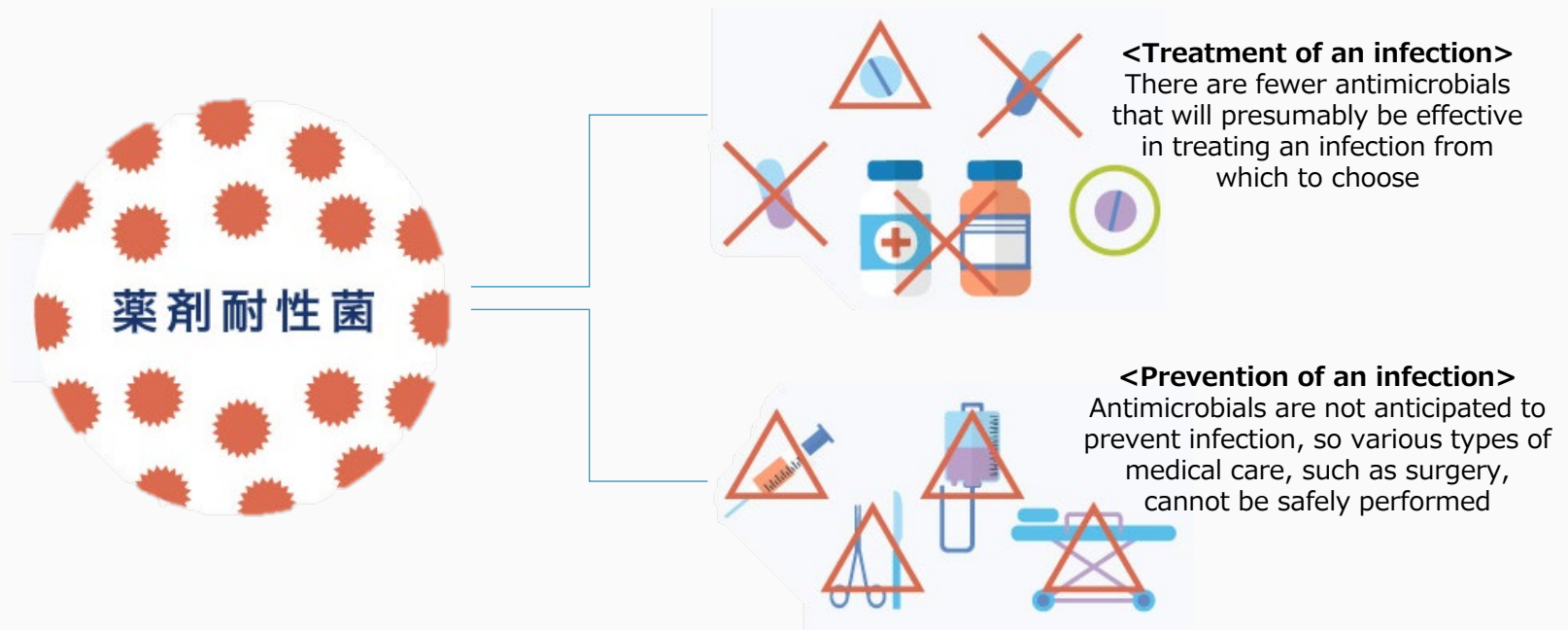
Antimicrobials and antimicrobial resistance (AMR)



Microorganisms have a greater chance to survive due to the necessary use of antimicrobials, and
drug-resistant microorganisms proliferate!

From the AMR Clinical Reference Center's website (with revisions by the presenter)

Antimicrobials and antimicrobial resistance (AMR)



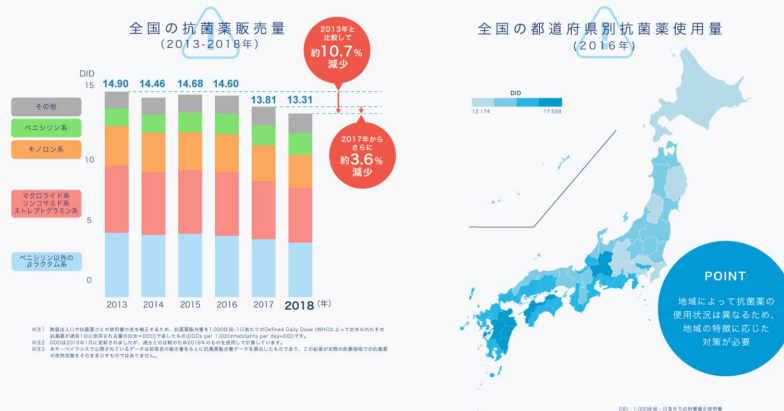
Various types of medical care are being hampered

by an increase in drug-resistant microorganisms

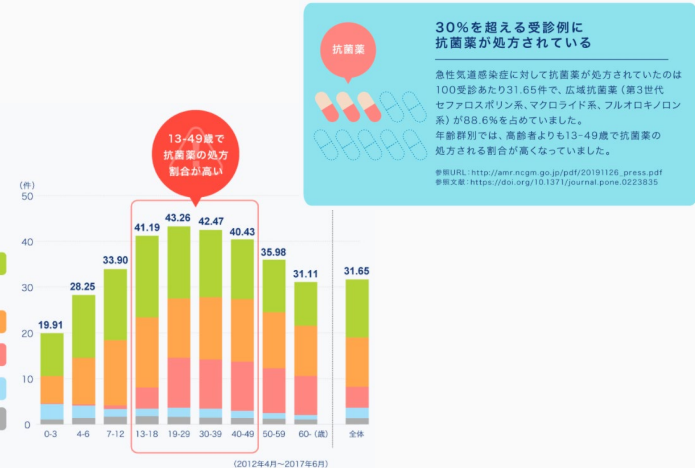
The role of the Pharmacoepidemiology Division

Monitoring and surveillance of antimicrobial use

Research on and development of a system for the proper use of antimicrobials



Surveillance of antimicrobial use
Japan Surveillance of Antimicrobial Consumption (JSAC)



Reduce unnecessary antimicrobial use

by clarifying and publicizing data on antimicrobial use and
by encouraging the proper use of antimicrobials

Surveillance of antimicrobial use (JSAC)

Ongoing **surveillance** of antimicrobial use

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- Changes in data on antimicrobial sales over time (2013-2021)

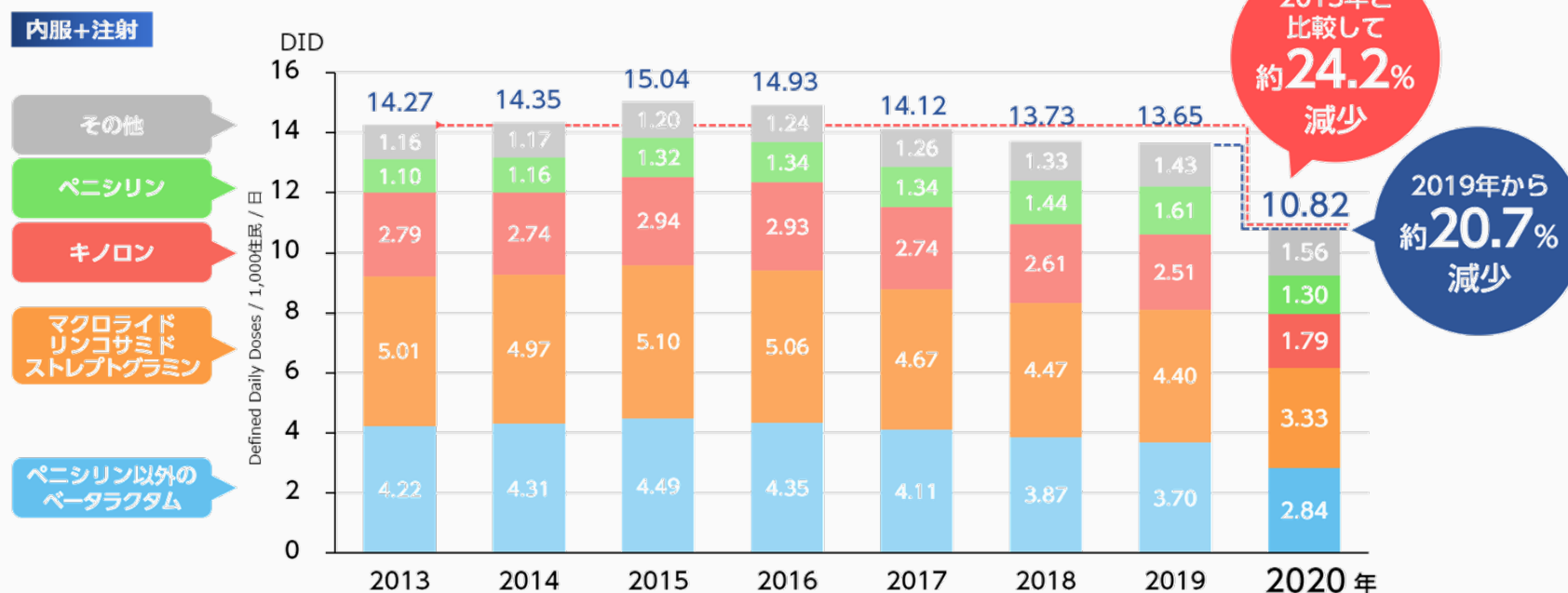
Surveillance of antimicrobial use Japan Surveillance of Antimicrobial Consumption (JSAC)
<https://amrcrc.ncgm.go.jp/surveillance/index.html>

Development of a **system** to encourage the proper use of antimicrobials

- A system to facilitate the proper use of antimicrobials in clinics
Monitoring of antimicrobial use in clinics

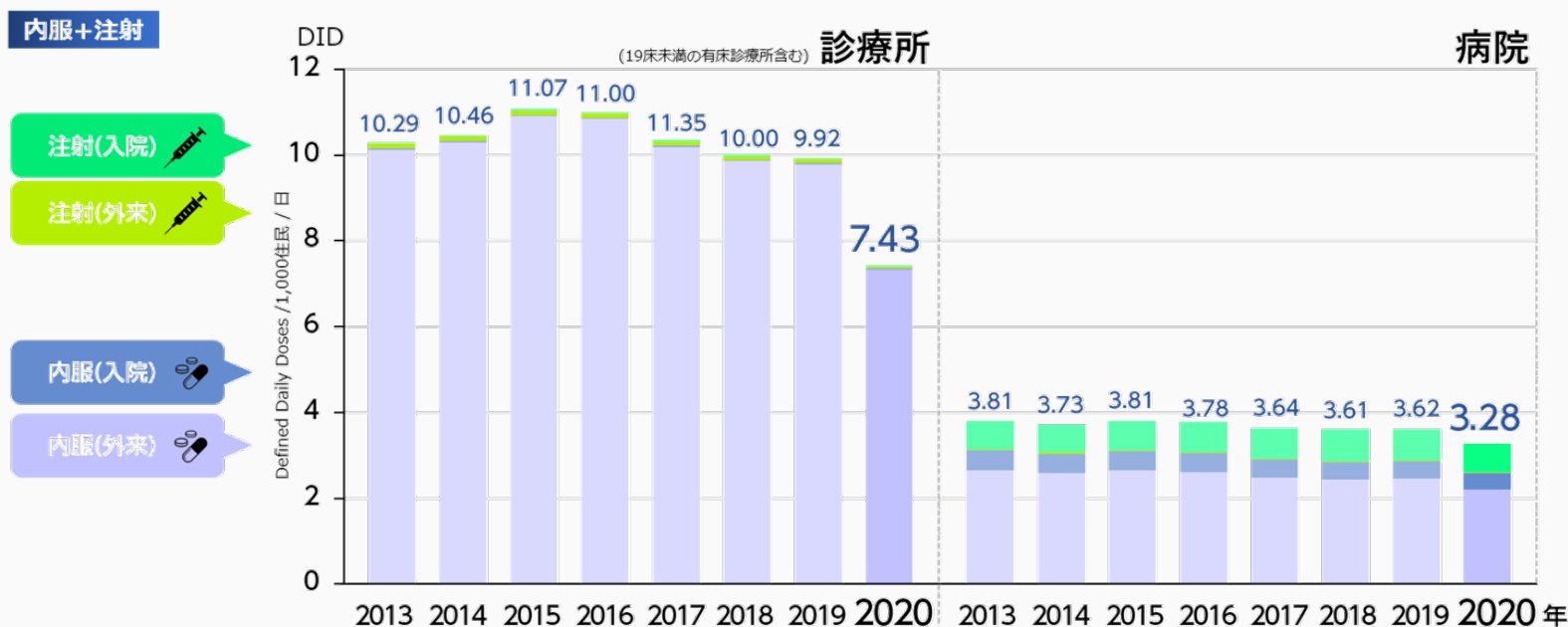
Usage of antimicrobials 2013-2020

全国抗菌薬使用量推移 2013-2020 抗菌薬種類(ATC3)による集計



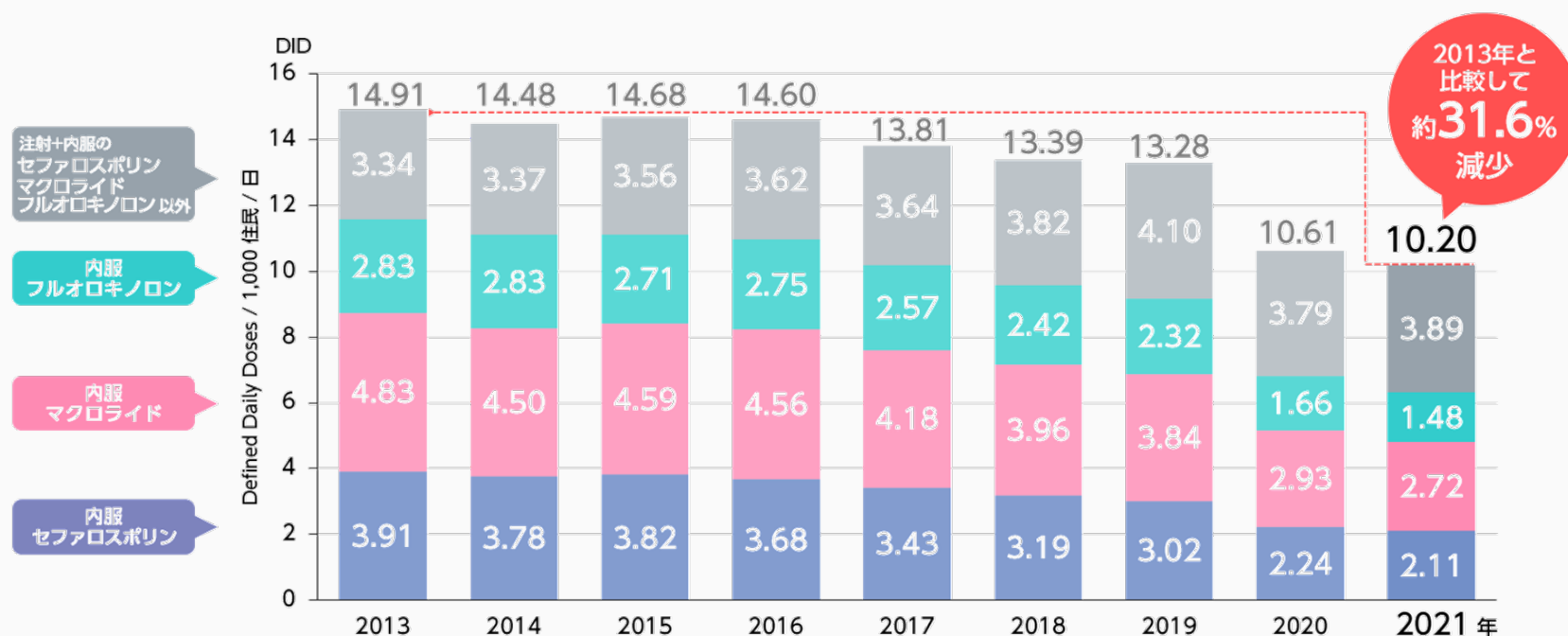
Usage of antimicrobials 2013-2020

全国抗菌薬使用量推移 診療所と病院に分けた集計 (厚生局への届け出に基づく)



Antimicrobial sales 2013-2021

全国抗菌薬販売量推移 2013-2021 (抗菌薬種類: ATC3別に分類)

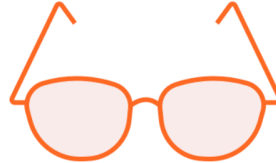


The AWaRe Classification



Access

Which indicates the antibiotic of choice for each of the 25 most common infections. These antibiotics should be available at all times, affordable and quality-assured.



Watch

Which includes most of the “highest-priority critically important antimicrobials” for human medicine and veterinary use. These antibiotics are recommended only for specific, limited indications



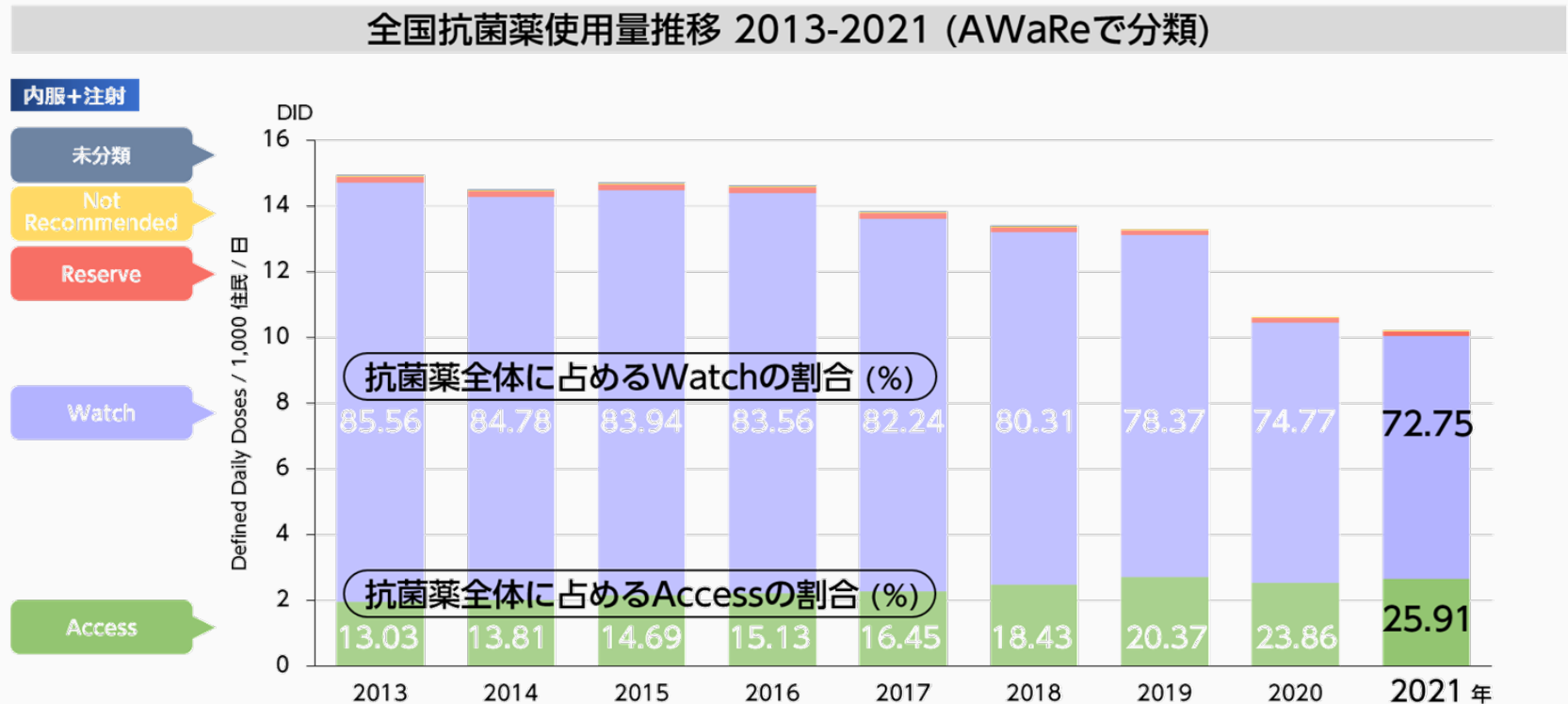
Reserve

Antibiotics that should only be used as a last resort when all other antibiotics have failed.

The WHO seeks to have **at least 60%** of all antimicrobial use involve antimicrobials in the Access group

Antimicrobial sales 2013-2021

Changes in the proportion of antimicrobials in the Access group



System development

Ongoing **surveillance** of antimicrobial use

- Changes in antimicrobial use over time based on billing data (2013-2020)
- Changes in antimicrobial sales over time (2013-2021)

Development of a **system** to encourage the proper use of antimicrobials

- A system to facilitate the proper use of antimicrobials in clinics

Monitoring of antimicrobial use in clinics

A system to facilitate the proper use of antimicrobials in clinics

Manual of Antimicrobial Stewardship



成人・学童期以降の小児編	
●急性気道感染症	1
・感冒	3
・急性鼻副鼻腔炎	
・急性咽頭炎	4
・急性気管支炎	
●急性下痢症	5
乳幼児編	
●急性気道感染症	7
・感冒・鼻副鼻腔炎	9
・急性咽頭炎	10
・クルーズ症候群	11
・急性気管支炎	12
・急性細気管支炎	13
・急性中耳炎	14
●急性下痢症	15
●気をつけるべき薬剤について	16
*患者・家族への説明	17

I 急性気道感染症とは

急性気道感染症は、急性上気道感染症(急性上気道炎)と急性下気道感染症(急性気管支炎)を含む概念であり、一般的には「風邪」、「風邪症候群」、「感冒」などの言葉が用いられている。

「風邪」は、狭義の「急性上気道感染症」という意味から「上気道から下気道感染症」を含めた広義の意味まで、様々な意味で用いられることがあり、気道症状だけでなく、急性(あるいは時に亜急性)の発熱や倦怠感、種々の体調不良を「風邪」と認識する患者が少なくないことが報告されている。

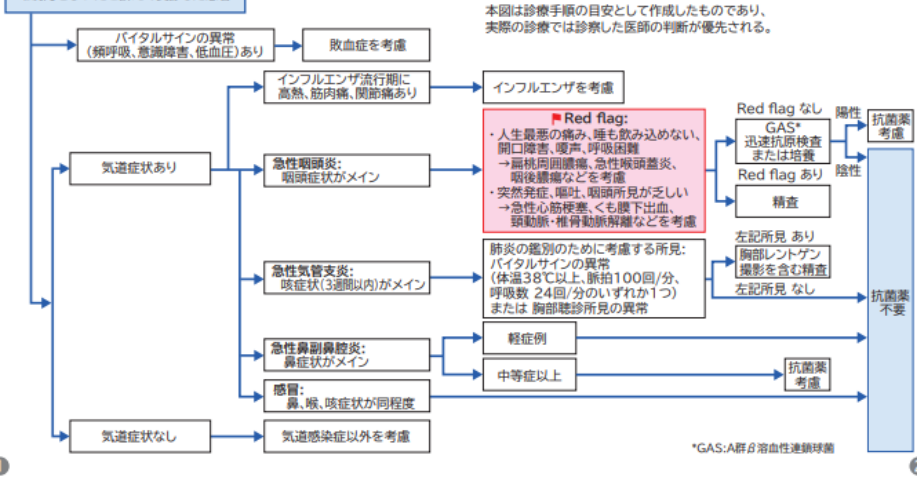
患者が「風邪をひいた」として受診する場合、その病態が急性気道感染症を指しているのかを区別することが鑑別診断のためには重要である。

急性気道感染症の病型分類

病型	鼻汁・鼻閉	咽頭痛	咳・痰
感冒	△	△	△
急性鼻副鼻腔炎	◎	×	×
急性咽頭炎	×	◎	×
急性気管支炎	×	×	◎

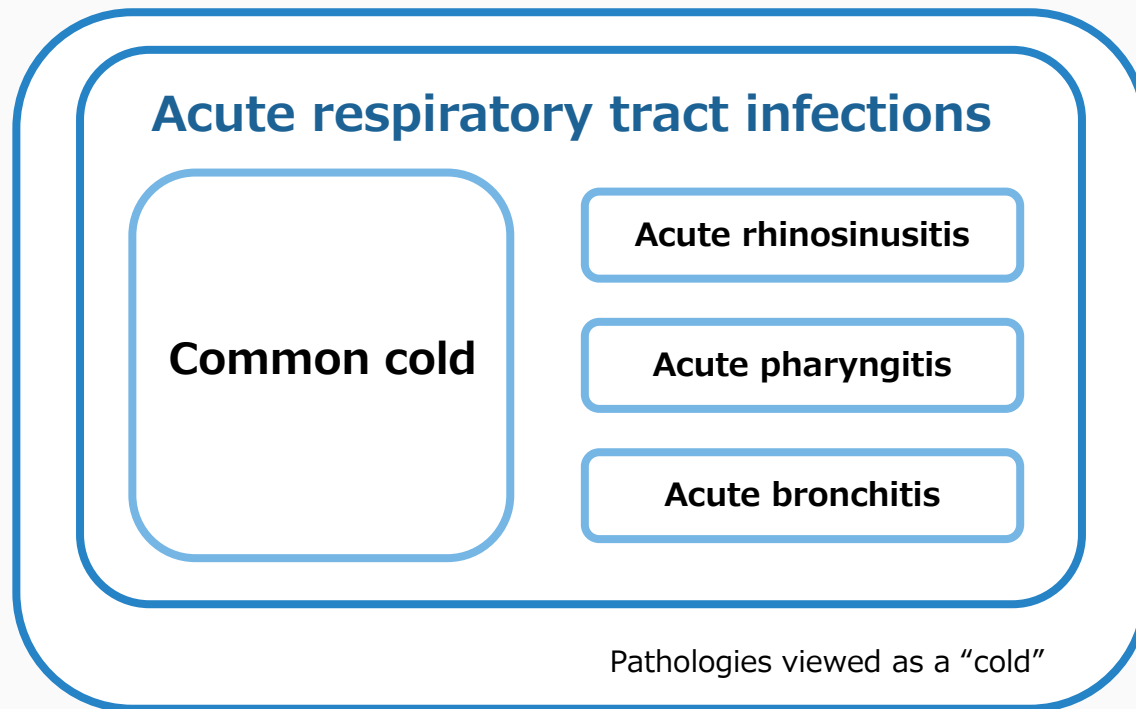
◎は主要症状
△は際立っていない程度で他症状と併存
×は症状なし〜軽度

「風邪」をひいたと訴えて受診した患者

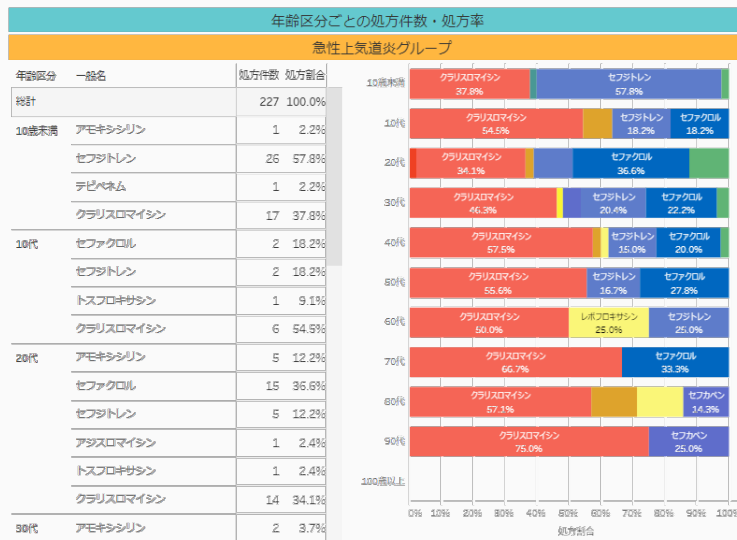
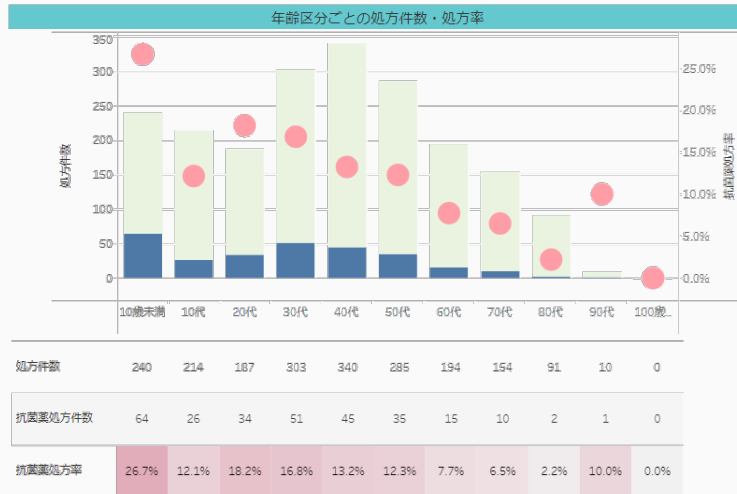


A system to facilitate the proper use of antimicrobials in clinics

Facilitation of the proper use of antimicrobials to treat

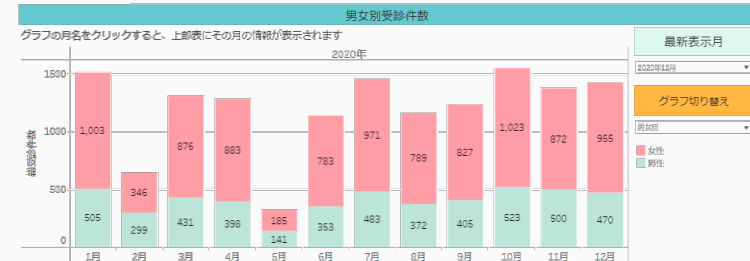


A system to facilitate the proper use of antimicrobials in clinics



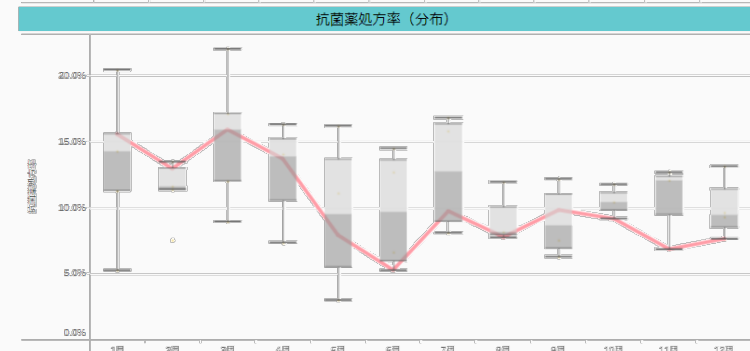
基本情報

2020年12月	合計	男性	女性
受診患者数	662	275	387
総処方件数	1,425	470	955
初診件数	332	151	181

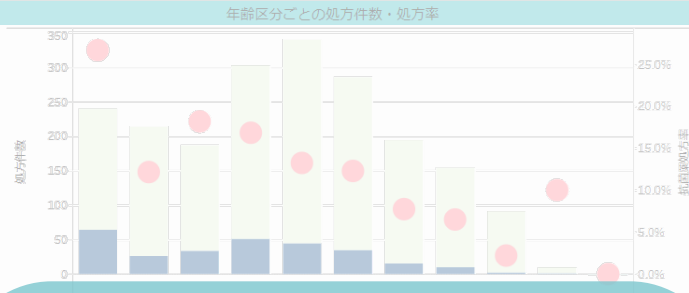


抗生薬処方率（統計データとの比較）

	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月
急性上気道炎の抗生薬処方率（中央値）	14.3%	11.7%	15.9%	13.9%	9.5%	9.7%	12.8%	8.2%	8.7%	10.5%	12.1%	9.5%
急性上気道炎の抗生薬処方率	15.6%	13.0%	15.9%	13.7%	8.0%	5.3%	9.8%	7.8%	9.9%	9.2%	6.9%	7.7%
割合差	1.3%	1.3%	0.0%	-0.2%	-1.6%	-4.4%	-3.0%	-0.4%	1.1%	-1.3%	-5.2%	-1.8%

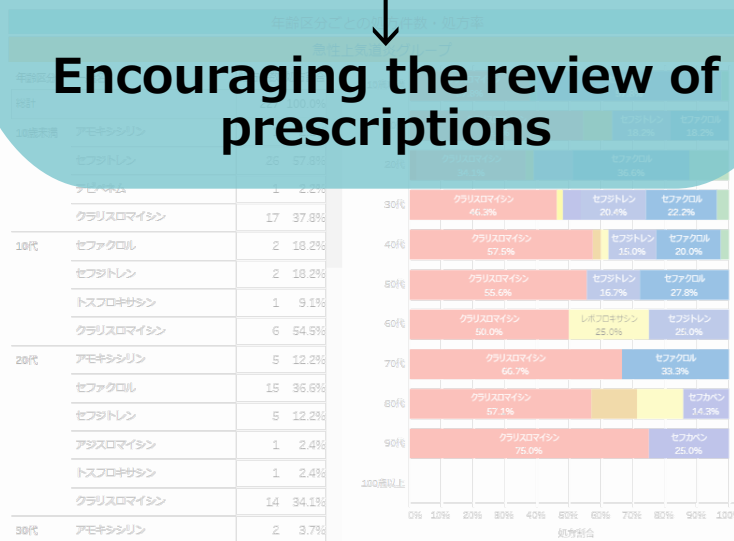


A system to facilitate the proper use of antimicrobials in clinics



Ascertaining the use of antimicrobials in individual clinics and comparing it to that in other clinics

Encouraging the review of prescriptions



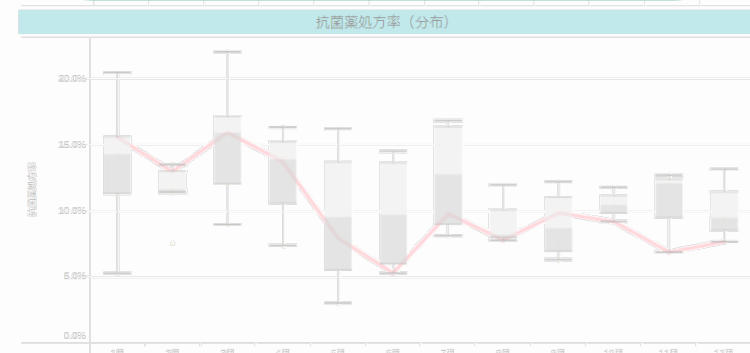
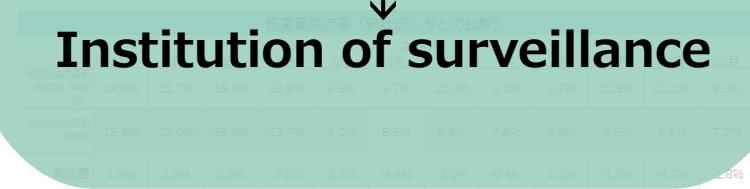
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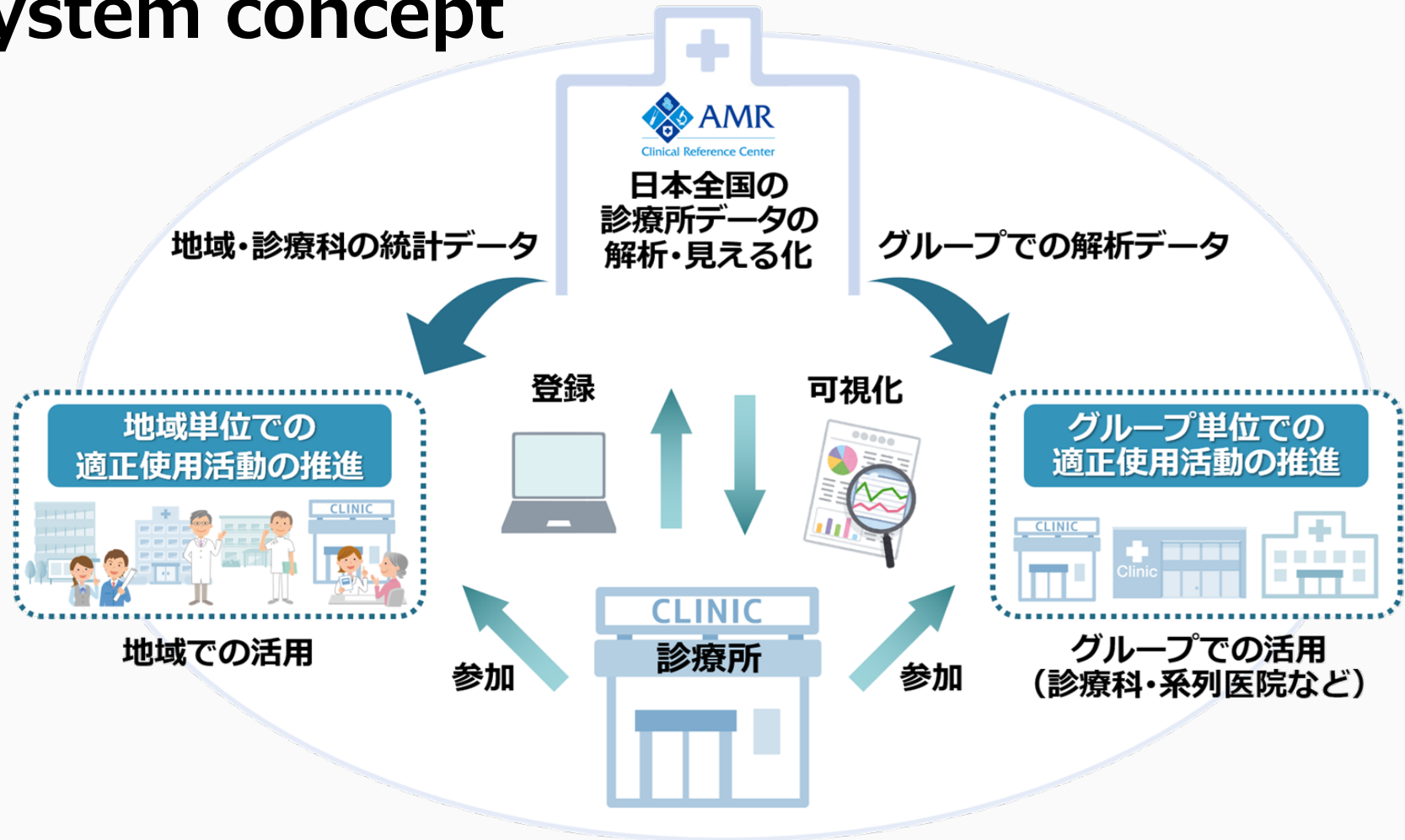
Visual presentation of the monitoring of antimicrobial use

Institution of surveillance



A system to facilitate the proper use of antimicrobials in clinics

System concept



Summary

Results prior to 2021

- Improving the mechanism for surveillance of antimicrobial use
- The amount of antimicrobials taken has tended to decrease

Topics for the future

- Continued antimicrobial surveillance and effective facilitation of the proper use of antimicrobials despite the effects of COVID-19
- Strategies for the proper use of antimicrobials on more limited targets
Widespread use of the system to facilitate the proper use of antimicrobials in clinics and enhancement of its features
Approaches to conditions besides respiratory tract infections, such as diarrhea and middle ear infections