

Infection Prevention and QAPI Reporting

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Objectives

- Identify the five elements of Quality Assurance Process Improvement (QAPI)
- Discuss the importance of goal setting in infection prevention
- List 3 potential process improvement projects (PIP) related to infection prevention
- Describe how PA-PSRS analytics can assist in infection reporting at QAPI committee

Quality Assurance Process Improvement

QAPI is the coordinated application of two mutually-reinforcing aspects of a quality management system: Quality Assurance (QA) and Performance Improvement (PI).

-Centers for Medicare and Medicaid Services

CMS Long-Term Care Final Rule Effective November 28, 2019

AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

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**DEPARTMENT OF HEALTH AND
HUMAN SERVICES**

**Centers for Medicare & Medicaid
Services**

**42 CFR Parts 405, 431, 447, 482, 483,
485, 488, and 489**

[CMS-3260-F]
RIN 0938-AR61

**Medicare and Medicaid Programs;
Reform of Requirements for Long-
Term Care Facilities**

AGENCY: Centers for Medicare &
Medicaid Services (CMS), HHS.
ACTION: Final rule.

SUMMARY: This final rule will revise the
requirements that Long-Term Care
facilities must meet to participate in the
Medicare and Medicaid programs.

- 42 CFR part § 483.80 Infection Control. Phase 3
 - Trauma Informed Care
 - Call system for each resident at bedside
 - Compliance and Ethics Program
 - Staff training
 - **Infection Preventionist in place**
 - **Coordination of QAPI plan with incorporation of Infection Prevention**

(CMS)

What is Quality Assurance?

- Process of meeting quality standards and assuring that care reaches an acceptable level
- A reactive, retrospective effort to examine why a facility failed to meet certain standards



What is Process Improvement?

- Proactive and continuous study of processes to prevent or decrease the likelihood of problems
- Aims to improve processes involved in health care delivery and resident quality of life



What is the Principle of QAPI?

- Delivery of clinical interventions safely and with high quality
- Emphasizes autonomy and choice for residents
- Facilities will have a written QAPI plan adhering to these principles



QAPI Activities

- QAPI activities involve members at all levels of the organization to:
 - Identify opportunities for improvement
 - Address gaps in systems or processes
 - Develop and implement an improvement or corrective plan
 - Continuously monitor effectiveness of interventions

5 Elements of QAPI

- Element 1: Design and Scope
- Element 2: Governance and Leadership
- Element 3: Feedback, Data Systems, and Monitoring
- Element 4: Performance Improvement Projects
- Element 5: Systematic Analysis and Systemic Action

Element 1: Design and Scope

- Ongoing program
- Address all services provided
- Evidence-based
- Written QAPI plan

Element 2: Governance and Leadership

- Developed with staff, resident, and family member participation
- Resources provided for QAPI program
- Non-punitive environment

Element 3: Feedback, Data Systems, and Monitoring

- Meaningful change
- Utilize various data sources
- Set benchmarks and monitor
- Track and investigate adverse events

Element 4: Performance Improvement Projects

- Based on areas of concern or areas that need increased staff focus
- Staff participation
- Meaningful to facility scope of services

Element 5: Systematic Analysis and Systemic Action

- Systematic approach to determine when in-depth analysis is needed
- Demonstrate proficiency in Root Cause Analysis (RCA)
- Continual learning
- Continuous improvement

QAPI Components

- Using data to identify opportunities for improvement
- Building on residents' own goals
- Bringing meaningful resident and family voices
- Incorporating caregivers in the QAPI mission
- Developing Performance Improvement Project teams
- Root Cause Analysis
- Undertaking systemic change
- Developing a feedback and monitoring system

Quality Measurement

- Quality measurement - The process of using data to evaluate performance against recognized quality standards
- Quality measurement can be used to improve care by:
 - Preventing the overuse, underuse, and misuse of antibiotics
 - Identifying what is working and not working
 - Driving accountability
 - Measuring and addressing disparities
 - Helping staff and prescribers make informed choices

Quality Measures

- Quality measure - A tool that is used to measure performance against a recognized standard of care
- Process measure - Determines how often the measured service occurred
- Outcome measure - Evaluates health as a result of the care they received

Where do the Numbers Come From?

- Numerator - The measure focus; describes the target process, condition, event, or outcome expected for the targeted population
- Denominator - Represents the number of residents/occurrences during a defined time period who were at risk of, or eligible for, the numerator event

Benefits of QAPI

- Competencies that equip you to solve quality problems and prevent their recurrence
- Competencies that allow you to seize opportunities to achieve new goals
- Fulfillment for caregivers, as they become active partners in performance improvement
- Better care and better quality of life for residents

Risk Assessment

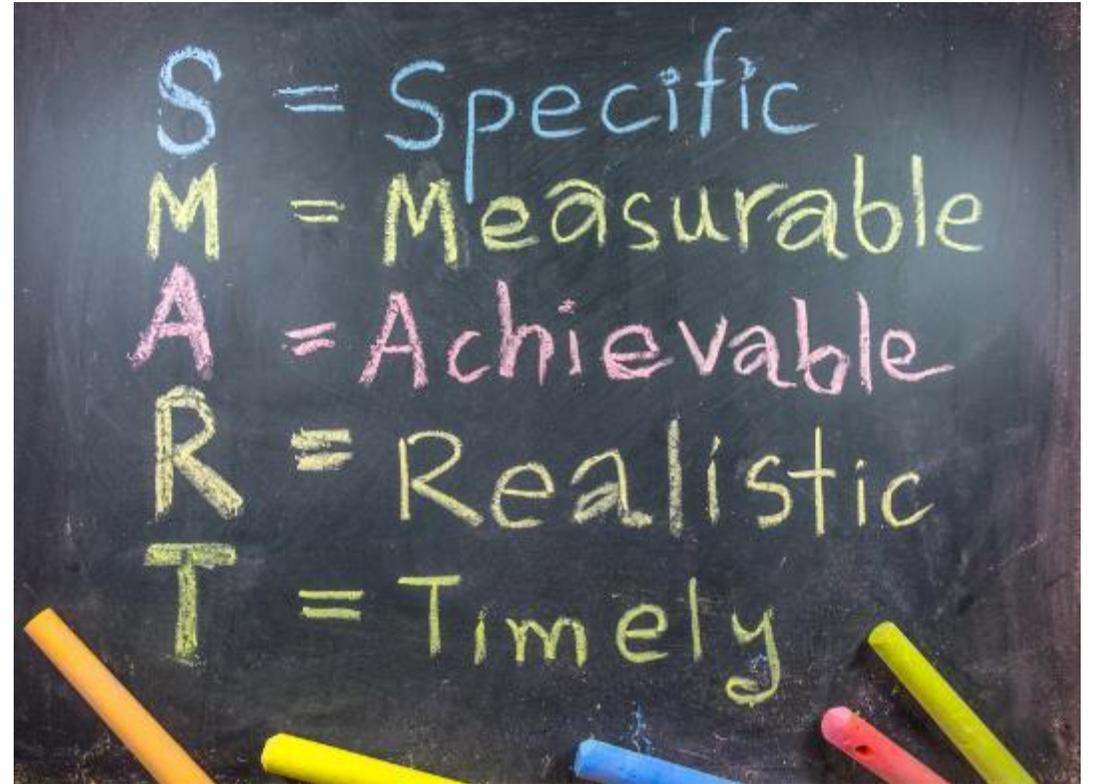
- Foundation of a facility's infection prevention plan
- Basis for developing written goals and measurable objectives
- Done on an annual basis

HSE RISK MATRIX							
		SEVERITY	1 Insignificant	2 Minor	3 Moderate	4 Major	5 Catastrophic
		CONSEQUENCES	People		Slight Injury	Minor Injury	Major Injury / Health effects
Environment			Slight Impact	Minor Impact	Moderate Impact	Major Impact	Massive Impact
Asset			Slight Damage	Minor Damage	Local Damage	Major Damage	Extensive Damage
Reputation			Slight Impact	Limited Impact	Considerable Impact	Major National Impact	Major International Impact
LIKELIHOOD	E Almost Certain	Incident has occurred several time in company	E1	E2	E3	E4	E5
	D Likely	Incident has occurred more than once per year in company	D1	D2	D3	D4	D5
	C Possible	Incident has occurred in company or more than once in industry world wide	C1	C2	C3	C4	C5
	B Unlikely	Incident has occurred in industry world wide	B1	B2	B3	B4	B5
	A Remotely likely to happen	Never heard of in industry world wide but could occur	A1	A2	A3	A4	A5

Goals

Goals assist in:

- Clarifying vision
- Providing direction
- Focusing resources
- Clarifying decision making
- Providing motivation



PIP Suggestions



Antibiotic Stewardship



- CMS regulation for facilities to have an antibiotic stewardship program
- Focus on one infection type, such as urinary tract infection

Antibiotic Stewardship Goals

Short term goal: 5% reduction in overall process and outcome measures from baseline

Long term goal: 10% reduction in overall process and outcome measures from baseline

- Process measures
 - Decrease in % of urine cultures for ASB
 - Decrease in % of antibiotic orders for ASB
 - Decrease in % of treated UTIs that do not meet criteria
- Outcome measures
 - Decrease in % of new antibiotic orders for all UTIs
 - Decrease in % of urine cultures performed

Device-Associated Infections

- Central line-associated bloodstream infections (CLABSIs) result in thousands of deaths each year and billions of dollars in added costs to the U.S. healthcare system.
- Catheter-associated urinary tract infections (CAUTI) are possibly the most preventable HAI, with significant potential cost savings.
- These infections are preventable by following best practices.

Device-Associated Infection Goals

- Reduce central line-associated bloodstream (CLABSI) from baseline
 - Short-term goal: 20% reduction, from ____/1000 device days to /1000 device days
 - Long-term goal: 50% reduction, from ____/1000 device days to /1000 device days
- Reduce catheter-associated urinary tract infections (CAUTI) from baseline
 - Short-term goal: 20% reduction, from ____ /1000 device days to /1000 device days
 - Long-term goal: 50% reduction, from ____/1000 device days to /1000 device days

Hand Hygiene Compliance

- Most important measure to prevent the spread of infection
- Improve hand hygiene compliance among all health care workers
- Increase knowledge on the importance of hand hygiene and the proper technique of hand hygiene to reduce healthcare-associated infections (HAIs)



Hand Hygiene Goals

- Hand hygiene compliance will increase on the resident care departments as measured on monthly auditing.
 - Short term goal: 90%
 - Long term goal: 95%
- Hand hygiene products (soap, paper towels, alcohol-based hand rub) will be readily available to staff as measured on monthly auditing.
 - Short term goal: 90%
 - Long term goal: 95%
- Residents and visitors will receive education on the importance of hand hygiene on an annual basis as measured on retrospective review.
 - Goal: 95%

Personal Protective Equipment (PPE) Compliance



- Standard Precautions and PPE are part of Bloodborne Pathogen Exposure Control Plan
- Improve PPE compliance among all healthcare workers
- Increase knowledge on the proper technique of donning and doffing PPE

PPE Goals

- PPE compliance will increase on the resident care departments as measured on monthly auditing.
 - Short-term goal: 90%
 - Long-term goal: 95%
- PPE supplies will be readily available to staff as measured on monthly auditing.
 - Short-term goal: 90%
 - Long-term goal: 95%
- Staff will receive education on donning and doffing of equipment annually and in the event of an outbreak.
 - Short-term goal: 90%
 - Long-term goal: 95%

Environmental Cleaning

- Helps reduce the incidence of HAIs
- Enhanced safety
- Protects everyone in the facility from potential transmission of a pathogenic organism



Environmental Cleaning Goals

- Environmental services staff will be compliant with hand hygiene and PPE usage.
 - Short-term goal: 90%
 - Long-term goal: 95%
- Cleaning agent is mixed appropriately and being used according to manufacturer recommendations for use.
 - Short-term goal: 90%
 - Long-term goal: 95%
- No food or drink is present on housekeeping cart.
 - Short-term goal: 90%
 - Long-term goal: 95%

Equipment Cleaning and Disinfection



- Blood contamination of glucometers creates the potential for bloodborne pathogen transmission.
- Noncritical medical equipment can be a fomite to harbor and transmit pathogens.
- Noncritical medical equipment should be disinfected after each resident use.

Equipment Cleaning and Disinfection Goals

- Glucometers are disinfected according to manufacturer instruction after each use.
 - Short-term goal: 90%
 - Long-term goal: 95%
- Medication carts are free of debris and cleaned as per policy.
 - Short-term goal: 90%
 - Long-term goal: 95%

Influenza Vaccination

- Single best way to protect yourself, your family, and your residents
- Provide a safe environment for staff, residents, and visitors from increased compliance with influenza vaccination



Influenza Vaccination Goals

- Increase in healthcare worker influenza vaccination rates from previous influenza season.
 - Short-term goal: _____% of employees vaccinated
 - Long-term goal: _____% of employees vaccinated
- Increase in resident influenza vaccination rates from previous influenza season.
 - Short-term goal: _____% of residents vaccinated
 - Long-term goal: _____% of residents vaccinated

Multi-drug Resistant Organisms (MDROs)

- MDROs have increased in prevalence in hospitals, long-term care facilities, and the community over the last three decades
- These organisms have a tremendous impact on resident safety
- Options for treating residents with MDRO infections are often extremely limited
- MDRO infections are associated with increased length of stay, costs, and mortality

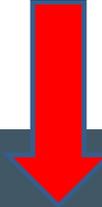
MDRO Goals

- Reduce healthcare-associated MDRO rate throughout the facility from baseline.
 - Short-term goal: 20% reduction from ____/1000 resident days to /1000 resident days
 - Long-term goal: 50% reduction from ____/1000 resident days to /1000 resident days

How Can PA-PSRS Analytics Assist?



PA-PSRS for Feedback



PA Patient Safety Authority

PA Pennsylvania Patient Safety Reporting System

Main Page Create New Report Administration Utilization Data Analytical Tools

The facility you are viewing: Demo Nur

Recent Event Reports

Filter By Report Date Date R

Showing 1 - 6 of 6 Total Events

EVENT ID	CARE AREA	INFECTION CONFIRMATION DATE	REPORT DATE
46676110	D. Skin	03/25/2020	03/25/2020 15:55
46676101	E. Devi	03/25/2020	03/25/2020 15:53
46676095	B. Resp	03/25/2020	03/25/2020 15:52
46676003	A. Urin	03/16/2020	03/16/2020 12:34
46675866-01	B. Resp	03/02/2020	03/02/2020 16:42
46648878	A. Urin	01/10/2020	01/28/2020 13:51

Analytical Tools Search Support Desk

- Search Submitted Event Reports (AC)
- Search Submitted Event Reports (NH)
- Search Patient Infection History Reports (NH)
- Event Report Data Analysis (AC)
- Event Report Data Analysis (NH)
- Interface Dashboard
- Data Export

Display 100 Events per Page

Infection Type Table

Central Line Utilization Rate
for Facility
January 2019 to December 2019

2019

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Resident Days	6435	5863	6517	6398	6489	6277	6385	6316	6122	6520	6482	6724
Central Line Days	255	288	349	245	291	307	297	269	333	361	365	280
Central Line Utilization Rate	3.96	4.91	5.36	3.83	4.48	4.89	4.65	4.26	5.44	5.54	5.63	4.16

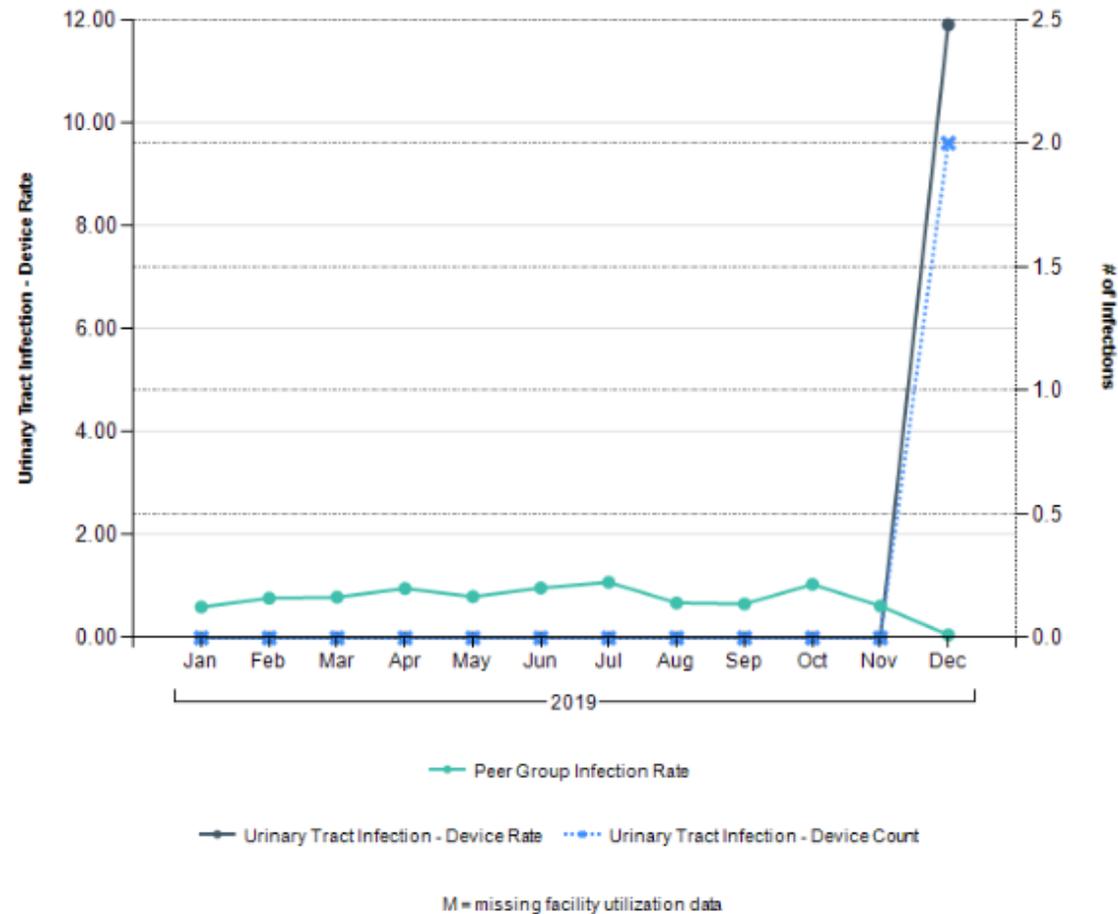
M = missing facility utilization data

* Central Line Utilization rate is calculated as the number of central line days divided by the number of resident days.

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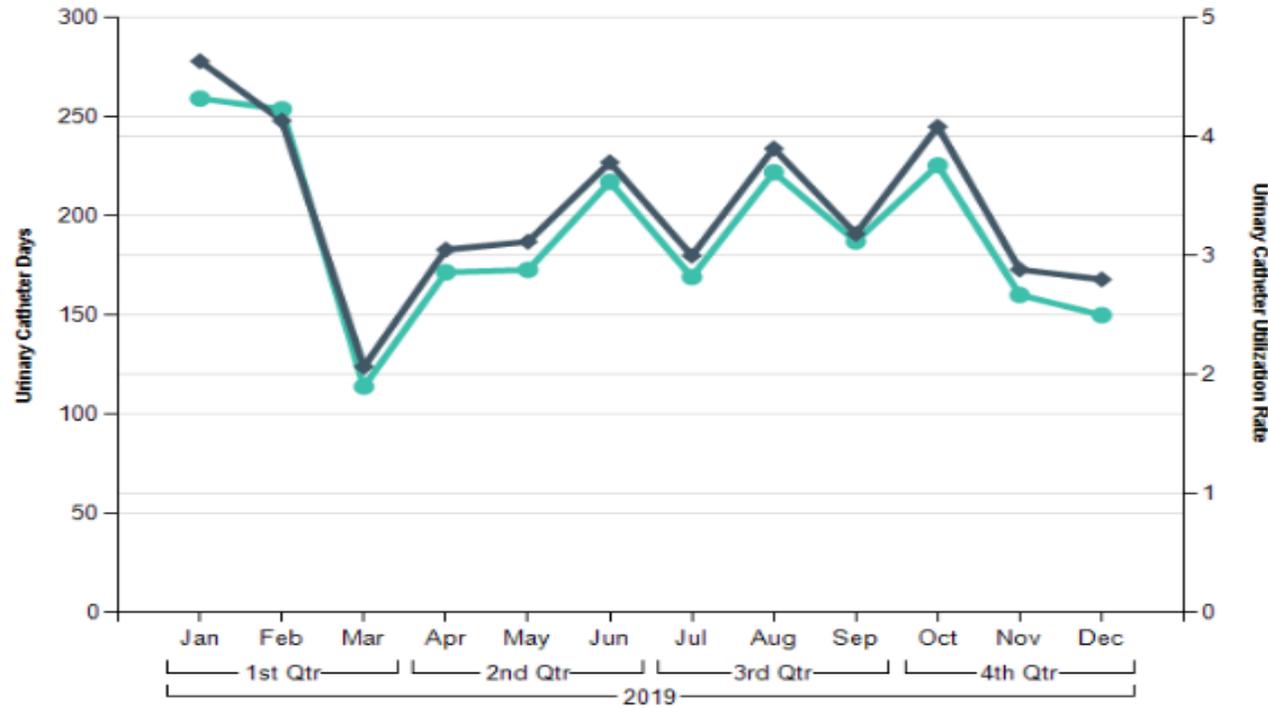
Infection Type Graphic

Urinary Tract Infection - Device Rate -vs- Peer Comparison Group
for Facility
January 2019 to December 2019



Urinary Catheter Utilization Rate for Facility

January 2019 to December 2019



Urinary Catheter Utilization Rate for Facility January 2019 to December 2019

	2019											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Resident Days	6435	5863	6517	6398	6489	6277	6385	6316	6122	6520	6482	6724
Urinary Catheter Days	278	248	124	183	187	227	180	234	191	245	173	168
Urinary Catheter Utilization Rate	4.32	4.23	1.90	2.86	2.88	3.62	2.82	3.70	3.12	3.76	2.67	2.50

M = missing facility utilization data

* Urinary Catheter Utilization rate is calculated as the number of urinary catheter days divided by the number of resident days.

What questions do you have?

Evaluation/Certificate of Continuing Education

- In order to receive a certificate of continuing education, each individual requesting credit must complete an evaluation including contact information. After completing the evaluation, a link will be provided to download and print a certificate of continuing education.
- Please participate in the evaluation by copying and pasting the below link into a new internet browser window:

<https://www.surveymonkey.com/r/InfectionPreventionandQAPIReporting08252021>

- Evaluations must be completed by 4 p.m. on September 1, 2021.
- If you experience any issues accessing the evaluation and/or certificate of continuing education, please feel free to direct any inquires to Shelly Mixell at shmixon@pa.gov.

References

- Agency for Healthcare Research and Quality (AHRQ). AHRQ Nursing Home Antimicrobial Stewardship Guide[online]
<https://www.ahrq.gov/nhguide/index.html>
- Association for Professionals in Infection Control and Epidemiology (APIC). The APIC text, 4th edition. 2014. (online). <http://text.apic.org/>
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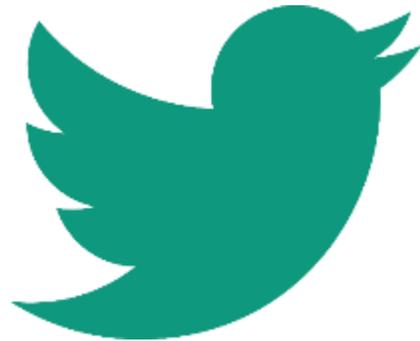
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- Lippincott Solutions. What are QAPI programs in long-term care? (2017). [online]. http://lippincottsolutions.lww.com/blog.entry.html/2017/11/27/what_are_qapi_progra-tfxO.html

Thank You!



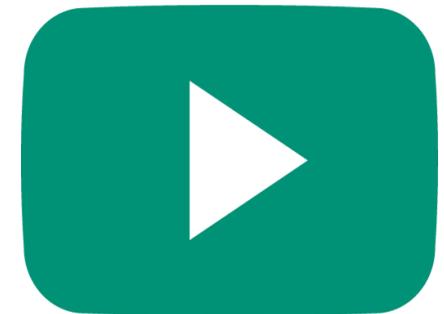
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