ADMINISTATIVE and SUPPLY CHAIN

The Administrative and Supply Chain section of the survey assess an HCO's performance in three topic areas:
1. Inventory Management
2. Financial Management
3. Personnel Management

Section 1: Inventory Management

(PDF-023) How would you characterize the deployment of Artificial Intelligence (AI) powered technology in your organization designed to support the following healthcare supply chain processes?
(Check one per row)

Artificial Intelligence: A system that may utilize machine learning and predictive analytics to assess a situation and either recommend or take actions that maximize chances of success/positive outcomes.

Deployed: A condition where the technology/solution has been tested and implemented in at least one area of the organization and the relevant users are generally utilizing the technology/solution as intended per industry expectations and organizational policy.

Piloting: A condition where the technology/solution is being tested in at least one area of the organization but not organization wide.

Not Supported: A condition where the organization has not yet tested the technology/solution in at least one area of the organization, has no intention of testing/implementing the technology/solution at this time or has not yet achieved funding approval for the acquisition of the technology/solution.

	Deployed	Piloting	Not Supported
A. Generate Low/Expiration Restock Alerts			
B. Check Product Availability			
C. Check Product Price/Contract price			
D. Process Purchase Requisition			
E. Process Purchase order			
F. Check Order Status/Routing			
G. Receive Order/Check-in			
H. Receive Invoice			
I. Pay Invoice			
J. Return Handling (e.g., creation, confirmation and cancellation of return orders)			

The intent of this question is to assess if HCO's use AI technology in their pharmacy and medical supply chain efforts, and how if so, how it is being used.

A. **Generate Low/Expiration Restock Alerts**

Stock alerts, also referred to as inventory alerts, tell you when there has been a significant or noteworthy change in your level of inventory.

B. **Check product availability**

The common measures of product availability are *product fill rate*, *order fill rate*, and *cycle service level (CSL)*. The product fill rate is the fraction of product demand that is satisfied with the product in inventory and should be measured over specified amounts of demand rather than time.

C. **Check Product price/Contract Price**

Sometimes a Vendor may invoice a product at a different price than they have contracted with an HCO. In an automatic system, the HCO sets up a contract price for a Vendor item and the system then automatically validate it when Invoices are entered and highlight violations during a check run can warn the HCO that a contract violation has occurred.

D. **Process Purchase Requisition**

Automating the purchase requisition system gives an HCO granular visibility into requests, approvals, key documents, and internal communication. The purchase requisition process is initiated when a company needs to make a purchase. The system automatically submits a purchase request for a specific good or service and once the purchase request is approved, a purchase order is sent to the selected supplier (seller) to be fulfilled.

E. **Process Purchase order**

Purchase Order Automation is the method of using an automation platform to enforce and automate a purchase order approval process. A centralized software would automatically send a purchase request to the appropriate team member for review and approval.

F. **Check order Status/routing**

Order tracking is a process of monitoring and tracking orders placed online and delivering real-time order status updates to the HCO. Via defined rules, orders can be routed to alternative vendors if there is a known bottleneck in product availability.

G. **Received Order/Check-in**

Part of the order tracking process. Once an order is delivered to the HCO and the HCO acknowledges receipt of the supply, the system automatically checks the order into the HCOs inventory.

H. **Receive Invoice**

Automated billing, also known as auto-invoicing or automated invoicing, is the process of using a software system to define, qualify, and then automate the creation and sending of invoices to clients and customers on a one-time or recurring cadence.

I. **Pay Invoice**

An automatic bill payment occurs when money is automatically transferred on a scheduled date to pay a recurring bill, such as a mortgage, credit card, or utility bill.

J. Return Handling

Return Management is the strategic process of handling the return of products back to the supplier or manufacturer. It's an integral part of the broader concept known as reverse logistics, which involves moving goods from their typical final destination to capture value or proper disposal.

(NEW-024) How would you characterize the adoption of the following technologies in your organization designed to support specific healthcare supply management activities.
(Check one per row)

> **Fully Adopted**: A condition where the technology/solution has been implemented organization wide and the relevant users are generally utilizing the technology/solution as intended per industry expectations and organizational policy.
> **Partially Adopted**: A condition where the technology/solution has been implemented in at least one area of the organization but not organization wide, or the technology/solution has been implemented organization wide but the relevant users are not utilizing the technology/solution as intended per industry expectations and/or organizational policy.
> **Not Adopted**: A condition where the organization has not yet implemented the technology/solution in at least one area of the organization and has no intention of implementing the technology/solution at this time or has not yet achieved funding approval for the acquisition of the technology/solution.

	Fully Adopted	Partially Adopted	Not Adopted
A. RFID/RTLS tags, sensors and/or Internet of Things (IoT) to track, monitor and control inventory			
B. Image recognition technology designed to capture full and accurate product details at the point of care			
C. Algorithms, Artificial Intelligence (AI), Machine Learning and/or Analytics to optimize inventory levels and predict future demand (including anticipated fluctuations)			

The intent of this question is to assess if HCO's use arguably advanced select technologies and processes in their pharmacy and medical supply chain efforts, and how if so, how they are being used.

A. RFID/RTLS tags, sensors and/or Internet of Things (IoT) to track, monitor and control inventory
> Devices used to monitor the movement and location of inventory.

B. Image recognition technology designed to capture full and accurate product details at the point of care
> Sometimes referred to as "computer vision", it is a technology machines use to automatically recognize images and describe them accurately and efficiently.

C. Algorithms, Artificial Intelligence (AI), Machine Learning and/or Analytics to optimize inventory levels and predict future demand
> Advanced analytics trained on historical data to predict future demand, detect anomalies, and optimize inventory levels.

Section 2: Financial Management

(PDF-025) How would you characterize the deployment of the following Artificial Intelligence (AI) powered revenue-cycle and contracts-management functionalities in your organization? (Check one per row) (ACUTE/AMBULATORY/LTPAC)

Artificial Intelligence: A system that may utilize machine learning and predictive analytics to assess a situation and either recommend or take actions that maximize chances of success/positive outcomes.

Deployed: A condition where the technology/solution has been tested and implemented in at least one area of the organization and the relevant users are generally utilizing the technology/solution as intended per industry expectations and organizational policy.

Piloting: A condition where the technology/solution is being tested in at least one area of the organization but not organization wide.

Not Supported: A condition where the organization has not yet tested the technology/solution in at least one area of the organization, has no intention of testing/implementing the technology/solution at this time or has not yet achieved funding approval for the acquisition of the technology/solution.

	Deployed	Piloting	Not Supported
A. Aggregation and measurement of cost of care across settings			
B. Aggregation of charges to form bundles and episodes, with the aggregation logic enabling different groupings for different payers			
C. Managing the distribution of bundled payments to the clinicians, care sites (e.g., hospitals) where care was delivered			
D. Provision of tools for retrospective analysis of clinical and administrative data (e.g., to identify areas for improving the quality of care and/or reducing the cost of care delivered)			
E. Reconciliation of charges and patient accounts to a monthly premium payment, billing co-payments and noncovered charges according to insurance agreements.			
F. Real-time patient identification and tracking for value-based care conditions (e.g., COPD)			
G. Estimates of out-of-pocket expenses for patients			

The move to ACOs represents an industry shift to focus on care coordination, quality improvement, and cost reduction — all facilitated by an emphasis on improved integration. This integration means that ACO members are concerned about population management, cost-effective care, streamlined clinical processes, proper reporting, and appropriate payment and reimbursement… all while maintaining a patient-centered focus. These values must be reflected

in the IT solutions available to providers. The intent of this question is to assess the HCO's use of technology in their revenue cycle and contract management efforts.

A. **Aggregation and measurement of cost of care across settings**
   Cost aggregation is the process of combining individual cost estimates to get one all-encompassing figure that represents a patient's spend for an episode of care.

B. **Aggregation of charges to form bundles and episodes, with the aggregation logic enabling different groupings for different payers**
   Episode-based payments, also known as bundled payments, were created by the Center for Medicare and Medicaid (CMS). This type of payment model came about with the Affordable Care Act with the goal of improving patient outcomes at a reduced cost to Medicare.

C. **Managing the distribution of bundled payments to the clinicians, care sites (e.g., hospitals) where care was delivered**
   With bundled payments, the total allowable acute and/or post-acute expenditures (target price) for an episode of care are predetermined. Participant providers share in any losses or savings that result from the difference between this target price and actual costs.

D. **Provision of tools for retrospective analysis of clinical and administrative data (e.g., to identify areas for improving the quality of care and/or reducing the cost of care delivered)**
   Retrospective reimbursement is a payment method in which a health care service provider bills an insurer for services provided after the service has been rendered.

E. **Reconciliation of charges and patient accounts to a monthly premium payment, billing co-payments and noncovered charges according to insurance agreements**
   Charge reconciliation is the process of comparing multiple charges to the prices you are billing patients for.

F. **Real-time patient identification and tracking for value-based care conditions (e.g., COPD)**
   Accurately identifying patients is a crucial first step to providing effective care. Verifying identities during registration prevents creation of duplicate records for existing patients. It also checks for records at affiliated providers to pull in external patient data.

G. **Estimates of out-of-pocket expenses for patients**
   Expenses for medical care that aren't reimbursed by insurance. Out-of-pocket costs include deductibles, coinsurance, and copayments for covered services plus all costs for services that aren't covered.

(PDF-026) What percentage of the following payer-related activities are accomplished using automated electronic routines and/or software? **(ACUTE/AMBULATORY/LTPAC)**
(Check one per row; leave blank if not applicable)

	100%	90-99%	50-90%	<50%	0%
A. Claims Status Inquiry					
B. Claims Submission					
C. Electronic Funds Transfer					
D. Eligibility Inquiry					
E. Pre-certification					
F. Referral and authorization					
G. Remittance Advice					
H. Clinical documentation attachments					
I. Address Verification					
J. Charge and order matching					
K. Charge Capture Reconciliation					
L. Contract Management					
M. Denial management					
N. Medical necessity criteria checks					
O. Physician-performance comparisons					

The intent of this question is to assess the HCO's use of technology in their interaction with external payors.

A. Claims Status Inquiry
> A health care claim status inquiry and response transaction is a communication between a provider and a payer about a health care claim.

B. Claims Submission
> The claim submission is defined as the process of determining the amount of reimbursement that the healthcare provider will receive after the insurance firm clears all the dues.

C. Electronic Funds Transfer
> Electronic funds transfer is the electronic transfer of money from one bank account to another, either within a single financial institution or across multiple institutions, via computer-based systems, without the direct intervention of bank staff.

D. Eligibility Inquiry
> The eligibility/benefit inquiry transaction is used to obtain information about a benefit plan for an enrollee, including information on eligibility and coverage under the health plan.

E. Pre-certification
> Pre-certification refers to the process through which a patient obtains authorization from their insurer to receive a particular prescription drug or health care service. It establishes that the

insurance company is willing to pay for the medical services in question, but it is important to note that pre-certification does not guarantee coverage. However, without it, there is no chance of the insurer covering the procedure, treatment, or drug.

F. Referral and authorization

An insurance referral is an approval from the primary care physician (PCP) for the patient to be seen by a specialist. The insurance referral must be initiated by a PCP with a reason for the visit, as well as their best guess as to how many appointments will be required to treat a condition. An authorization is a decision by a health insurer or plan that a health care service, treatment plan, prescription drug or durable medical equipment is medically necessary.

G. Remittance Advice

The Remittance Advice (RA) contains information about claim payments that a payor sends, along with the payments, to providers, physicians, and suppliers. The RA, which may either be in the form of an Electronic Remittance Advice (ERA) or a Standard Paper.

H. Clinical documentation attachments

Attachments refer to the exchange of patient-specific medical information or supplemental documentation to support an administrative healthcare transaction and are a bridge between clinical and administrative data.

I. Address Verification

An address verification service is a service provided by major credit card processors to enable merchants to authenticate ownership of a credit or debit card used by a customer. AVS is done as part of the merchant's request for authorization in a non-face-to-face credit card transaction.

J. Charge and order matching

The hospital chargemaster is how providers communicate medical bills to payers and patients. In every case, the chargemaster is being consulted, and data is drawn from it, to match the charge to the specified procedure, item, or drug.

K. Charge Capture Reconciliation

Charge reconciliation is the act of comparing charges captured to the services provided. It is an important process within a health care organization's revenue cycle to ensure consistent, timely, and accurate charge capture and resolution of pending charges.

L. Contract Management

Contract management is the process of managing legally binding agreements from initiation through to execution. Activities involved can be administrative and strategic - depending on who handles which stage.

M. Denial management

Denial management in medical billing refers to the strategic process of analyzing, correcting, and preventing claim denials. A claim denial occurs when a payer, like Medicare or a commercial health insurance company, declines to honor a provider's request to be reimbursed for medical care.

N. Medical necessity criteria checks

"Medically Necessary" or "Medical Necessity" means health care services that a physician, exercising prudent clinical judgment, would provide to a patient. The service must be: For the purpose of evaluating, diagnosing, or treating an illness, injury, disease, or its symptoms.

O. Physician-performance comparisons

A tool that allows an HCO to compare the performance of an individual physician to a peer group of providers.

(PDF-027) How would you characterize the adoption of the following bed/exam room tracking or patient-flow software system settings in your organization (<u>Note</u>: bed tracking/patient-logistics management may be functionality included within your electronic health record)?
(Check one per row)

> **Fully Adopted**: A condition where the technology/solution has been implemented organization wide and the relevant users are generally utilizing the technology/solution as intended per industry expectations and organizational policy.
>
> **Partially Adopted**: A condition where the technology/solution has been implemented in at least one area of the organization but not organization wide, or the technology/solution has been implemented organization wide but the relevant users are not utilizing the technology/solution as intended per industry expectations and/or organizational policy.
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> **Not Adopted**: A condition where the organization has not yet implemented the technology/solution in at least one area of the organization and has no intention of implementing the technology/solution at this time or has not yet achieved funding approval for the acquisition of the technology/solution.

	Fully Adopted	Partially Adopted	Not Adopted
A. Integrated patient logistics system (includes patient status, pending orders, critical lab results and room availability for the entire enterprise)			
B. RFID/RTLS tags, sensors and/or Internet of Things (IoT) patient location system integrated into the bed-tracking system to automate patient movement (Acute/INTL Acute/LTPAC/INTL LTPAC)			
C. Tracking system for emergency department beds (Acute/INTL Acute)			
D. Tracking system for observation beds (Acute/INTL Acute)			
E. Tracking system for in-patient beds (Acute/INTL Acute)			
F. Tracking system for ICU beds (Acute/INTL Acute)			
G. Transfer center (Acute/INTL Acute)			
H. Tracking system for exam rooms (Ambulatory/INTL Ambulatory)			

The intent of this question is to assess if HCO's use varied technologies in their tracking of patient beds/exam rooms, and if so, how extensively it is used.

A. Integrated patient logistics system
> A system that assists with the clinical and business decision processes that occur when a patient needs to be assigned to a specific bed location.

B. RFID/RTLS patient location system integrated into the bed-tracking system to automate patient movement

Bed tracking provides visibility of the location and status of hospital beds at any given time. Bed tracking is critical to bed management – you can't have an effective bed management system without a robust bed tracking solution in place.

C. Tracking system for emergency department beds

D. Tracking system for observation beds

E. Tracking system for in-patient beds

F. Tracking system for ICU beds

G. Transfer center

A transfer center is a centralized location managing all components of a patient's transfer into a hospital system. This includes the process of identifying an accepting physician and coordinating the workflow required to place a patient in the most appropriate patient care unit.

H. Tracking system for exam rooms

Section 3: Personnel Management

(NEW-028) How would you characterize the adoption of the following <u>manager</u> self-service tools in your organization? The capabilities should be available both via an online portal and via mobile devices.
(Check one per row)

Fully Adopted: A condition where the technology/solution has been implemented organization wide and the relevant users are generally utilizing the technology/solution as intended per industry expectations and organizational policy.

Partially Adopted: A condition where the technology/solution has been implemented in at least one area of the organization but not organization wide, or the technology/solution has been implemented organization wide but the relevant users are not utilizing the technology/solution as intended per industry expectations and/or organizational policy.

Not Adopted: A condition where the organization has not yet implemented the technology/solution in at least one area of the organization and has no intention of implementing the technology/solution at this time or has not yet achieved funding approval for the acquisition of the technology/solution

	Fully Adopted	Partially Adopted	Not Adopted
A. Access organizational chart with ability to drill down into employee level detail information			
B. Approve requests for time off (PTO), employee leave and overtime			
C. Approve employee travel requests, expense reports and purchase request			
D. Perform employee performance reviews and establish future performance goals			
E. Access to Real-time operational budget versus expense monitoring, financial modeling, and budget forecasting			
F. Post open positions, review candidates, hire, onboard and terminate employee			
G. View and update employee benefits/compensation information			
H. Approve requests for new work shifts or work shift swaps			
I. Approve employee timecards			

The intent of this question is to assess if HCO's use varied technologies in their tracking of patient beds/exam rooms, and if so, how extensively it is used.

A. Access organizational chart with ability to drill down into employee level detail information

B. Approve requests for time off (PTO), employee leave and overtime

C. Approve employee travel requests, expense reports and purchase request

D. Perform employee performance reviews and establish future performance goals
   A tool which assists in setting, communicating and evaluating goals at the individual, departmental and organizational levels.

E. Access to Real-time operational budget versus expense monitoring, financial modeling, and budget forecasting
   Rather than setting a single rigid budget at the start of the financial year or quarter, HCOs can track their spend in real-time to address trends and emerging needs. This enables HCOs to reallocate funds as necessary and assess the effectiveness of these on-the-fly.

F. Post open positions, review candidates, hire, onboard and terminate employee
   Recruitment tools run the gamut, and they include applicant tracking systems, job aggregators, libraries of skills assessments and social media management platforms.
   Onboarding tools are tools created for the purpose of improving the user onboarding process. They streamline, guide and introduce new users to your product and show them how to use it.

G. View and update employee benefits/compensation information
   Benefits administration tool is a type of software that helps organizations manage benefits provided to employees, such as 401(k) retirement plans, health insurance, and paid time off.
   Compensation management tools enable companies to run periodic reviews, update cycles and automate payments, guaranteeing fair and secure compensation.

H. Approve requests for new work shifts or work shift swaps

I. Approve employee timecards
   Often referred to as a time card app or timesheet software, these technologies are mobile software applications used for employee time-tracking. As with all other types of electronic time clocks, a mobile time clock keeps track of employee hours worked.

(NEW-029) How would you characterize the adoption of the following <u>employee</u> self-service tools in your organization? The capabilities should be available both via an online portal and via mobile devices.
(Check one per row)

Fully Adopted: A condition where the technology/solution has been implemented organization wide and the relevant users are generally utilizing the technology/solution as intended per industry expectations and organizational policy.

Partially Adopted: A condition where the technology/solution has been implemented in at least one area of the organization but not organization wide, or the technology/solution has been implemented organization wide but the relevant users are not utilizing the technology/solution as intended per industry expectations and/or organizational policy.

Not Adopted: A condition where the organization has not yet implemented the technology/solution in at least one area of the organization and has no intention of implementing the technology/solution at this time or has not yet achieved funding approval for the acquisition of the technology/solution.

	Fully Adopted	Partially Adopted	Not Adopted
A. View payroll and tax related documents, including earnings, pay checks, leave balances and tax withholdings			
B. Update payroll related documents, including direct deposit and tax withholding			
C. Update personal information in the human resources system			
D. Request time off (PTO) and leave			
E. View upcoming work schedules and shifts			
F. Request new work shifts, bid for shifts, or swap shifts with another employee			
G. Apply for other positions within the organization			
H. Access all required and optional training module			

The intent of this question is to assess the HCO's use of technology in their administrative support of employees.

A. View payroll and tax related documents, including earnings, pay checks, leave balances and tax withholdings

B. Update payroll related documents, including direct deposit and tax withholding

C. Update personal information in the human resources system

D. Request time off (PTO) and leave

E. View upcoming work schedules and shifts

F. Request new work shifts, bid for shifts, or swap shifts with another employee

Self-scheduling is when schedulers allow employees to essentially choose their own shifts. The scheduler creates open shifts and the employees are then able to self-select shifts they are eligible for and able to work. Shift swapping occurs when an employee can no longer work a shift on their appointed schedule, so they swap that shift with another employee. Shift swap tools can help employees amend their schedules while keeping their overall hours intact, without involving management.

G. Apply for other positions within the organization

H. Access all required and optional training module

A learning management system (LMS) is a software application or web-based technology used to plan, implement and assess a specific learning process.

(NEW-030) Which of the following technologies does your organization use to support your organization's employee retention efforts?
(Check all that apply)
Definitions

> **Voice of Employee platforms**: Technologies allowing a continual listening approach for employers to gauge employee concerns and insights (e.g., weekly pulse surveys).
> **AI-driven sentiment analysis tools**: Advanced analytical tools designed to analyze employee feedback/survey comments leading to identification of hidden or emerging issues impacting employee satisfaction and attrition.
> **Internal Talent Marketplaces:** Artificial intelligence powered technologies designed to match open roles with employees, based on the skills, education and/or experience workers list in their personal profiles.
> **Pay Equity and Compensation benchmarking software:** Software designed to measure compensation disparities based on workers' protected identities, including gender, race, age, ethnicity and disability.
> **Retention Risk Analytics:** Tools using predictive analytics to assess the flight risk of employees by tracking and measuring factors commonly associated with voluntary turnovers.
> **Digital Wellness Platforms and Apps**: Tools allowing employees access to support services (e.g., meditation apps/videos; financial wellness platforms; virtual sessions with license therapists; etc.) for those intimidated by publicly seeking assistance for emotional or psychological issues.
> **Employee Recognition Software Platforms**: Software platforms designed to recognize an employee's quality work as well as acknowledging life events (e.g., service anniversaries, weddings, babies and birthdays) or even for completing onboarding.

A. Voice of Employee platforms
B. AI-driven sentiment analysis tools
C. Internal Talent Marketplaces
D. Pay Equity and Compensation benchmarking software
E. Retention Risk Analytics
F. Digital Wellness Platforms and Apps
G. Employee Recognition Software Platforms