

are not entitled to retransmission consent.

In 2019, the Commission adopted new rules governing the delivery and form of carriage election notices. Electronic Delivery of MVPD Communications, Modernization of Media Regulation Initiative, MB Docket Nos. 17–105, 17–317, Report and Order and Further Notice of Proposed Rulemaking, FCC 19–69, 34 FCC Rcd 5922(2019) (2019 Report and Order). That decision modernized the carriage election notice rules by moving the process online for most broadcasters and multichannel video programming distributors (MVPDs), but the Commission sought comment on how to apply these updated rules to certain small broadcast stations and MVPDs.

In 2020, the Commission adopted a Report and Order that resolved the remaining issues regarding carriage election notice rules for small broadcast stations and MVPDs. Electronic Delivery of MVPD Communications, Modernization of Media Regulation Initiative, MB Docket Nos. 17–105, 17–317, Report and Order, FCC 20–14, 2020 WL 948697 (rel. Feb. 25, 2020) (2020 Report and Order). Pursuant to that decision, the obligations of certain small broadcasters and MVPDs were slightly modified.

This information collection is being revised to reflect the changes to 47 CFR 76.64(h) as well as other new obligations adopted in the 2020 Report and Order, which require review and approval from the Office of Management and Budget (OMB).

47 CFR 76.64(h)(5) is amended to require low power television stations and non-commercial educational translator stations that are qualified under 47 CFR 76.55 and retransmitted by an MVPD to, beginning no later than July 31, 2020, respond as soon as is reasonably possible to messages or calls from MVPDs that are received via the email address or phone number the station provides in the Commission's Licensing and Management System (LMS) database.

A qualified Low Power Television (LPTV) station that changes its carriage election must send an election change notice to each affected MVPD's carriage election-specific email address by the carriage election deadline. Such change notices must include, with respect to each station covered by the notice: The station's call sign, the station's community of license, the DMA where the station is located, the specific change being made in election status, and an email address and phone number for carriage-related questions. LPTV notices to cable operators need to

identify specific cable systems for which a carriage election applies only if the broadcaster changes its election for some systems of the cable operator but not all. In addition, the broadcaster must carbon copy *ElectionNotices@FCC.gov*, the Commission's election notice verification email inbox, when sending its carriage elections to MVPDs.

All qualified LPTV stations, whether being carried pursuant to must carry or retransmission consent, must send an email notice to all MVPDs that are or will be carrying the station no later than the next carriage election deadline of October 1, 2020. Qualified LPTVs must do so even if they are not changing their carriage status from the current election cycle. These notifications must be sent to an MVPD's carriage election-specific email address, must be copied to *ElectionNotices@FCC.gov*, and must include the same information required for a change notification except that the notification may simply confirm the existing carriage status rather than a change in status.

All qualified NCE translator stations must provide email notice to all MVPDs that are or will be carrying the translator no later than the next carriage election deadline of October 1, 2020. Similar to qualified LPTVs, these notifications must be sent to an MVPD's carriage election-specific email address, must be copied to *ElectionNotices@FCC.gov*, and must include the station's call sign, the station's community of license, and the DMA where the station is located and within which it has elected to be carried.

Federal Communications Commission.

**Cecilia Sigmund,**

*Federal Register Liaison Officer, Office of the Secretary.*

[FR Doc. 2020–06235 Filed 3–24–20; 8:45 am]

**BILLING CODE 6712–01–P**

## FEDERAL RESERVE SYSTEM

### Change in Bank Control Notices; Acquisitions of Shares of a Bank or Bank Holding Company

The notificants listed below have applied under the Change in Bank Control Act (Act) (12 U.S.C. 1817(j)) and § 225.41 of the Board's Regulation Y (12 CFR 225.41) to acquire shares of a bank or bank holding company. The factors that are considered in acting on the applications are set forth in paragraph 7 of the Act (12 U.S.C. 1817(j)(7)).

The applications listed below, as well as other related filings required by the Board, if any, are available for immediate inspection at the Federal

Reserve Bank indicated. The applications will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the standards enumerated in paragraph 7 of the Act.

Comments regarding each of these applications must be received at the Reserve Bank indicated or the offices of the Board of Governors, Ann E. Misback, Secretary of the Board, 20th Street and Constitution Avenue NW, Washington, DC 20551–0001, not later than April 8, 2020.

*A. Federal Reserve Bank of St. Louis* (David L. Hubbard, Senior Manager) P.O. Box 442, St. Louis, Missouri 63166–2034. Comments can also be sent electronically to

*Comments.applications@stls.frb.org:*

1. *The Combs Family Trust dated March 12, 2015, Kendall L. Combs and Patricia A. Combs, as co-trustees, both of Hollister, Missouri; Randall G. Combs or Beckie D. Combs, Alton, Missouri; the Michael D. Combs and Sandra L. Combs Family Revocable Trust dated January 7, 2016, Michael D. Combs and Sandra L. Combs, as co-trustees, both of Walnut Shade, Missouri;* to acquire and to retain voting shares of Alton Bancshares, Inc., and thereby indirectly acquire and retain voting shares of Alton Bank, both of Alton, Missouri, and First Community Bank of The Ozarks, Branson, Missouri.

Board of Governors of the Federal Reserve System, March 19, 2020.

**Yao-Chin Chao,**

*Assistant Secretary of the Board.*

[FR Doc. 2020–06195 Filed 3–24–20; 8:45 am]

**BILLING CODE 6210–01–P**

## FEDERAL TRADE COMMISSION

[File No. 191 0082]

### Danaher Corporation; Analysis of Agreement Containing Consent Orders To Aid Public Comment

**AGENCY:** Federal Trade Commission.

**ACTION:** Proposed consent agreement; request for comment.

**SUMMARY:** The consent agreement in this matter settles alleged violations of federal law prohibiting unfair methods of competition. The attached Analysis of Agreement Containing Consent Order to Aid Public Comment describes both the allegations in the complaint and the terms of the consent order—embodied in the consent agreement—that would settle these allegations.

**DATES:** Comments must be received on or before April 24, 2020.

**ADDRESSES:** Interested parties may file comments online or on paper, by following the instructions in the Request for Comment part of the **SUPPLEMENTARY INFORMATION** section below. Please write: “Danaher Corporation; File No. 191 0082” on your comment, and file your comment online at <https://www.regulations.gov> by following the instructions on the web-based form. If you prefer to file your comment on paper, please mail your comment to the following address: Federal Trade Commission, Office of the Secretary, 600 Pennsylvania Avenue NW, Suite CC-5610 (Annex D), Washington, DC 20580, or deliver your comment to the following address: Federal Trade Commission, Office of the Secretary, Constitution Center, 400 7th Street SW, 5th Floor, Suite 5610 (Annex D), Washington, DC 20024.

**FOR FURTHER INFORMATION CONTACT:** Lisa DeMarchi Sleight (202-326-2535), Bureau of Competition, Federal Trade Commission, 600 Pennsylvania Avenue NW, Washington, DC 20580.

**SUPPLEMENTARY INFORMATION:** Pursuant to Section 6(f) of the Federal Trade Commission Act, 15 U.S.C. 46(f), and FTC Rule 2.34, 16 CFR 2.34, notice is hereby given that the above-captioned consent agreement containing a consent order to cease and desist, having been filed with and accepted, subject to final approval, by the Commission, has been placed on the public record for a period of thirty (30) days. The following Analysis of Agreement Containing Consent Order to Aid Public Comment describes the terms of the consent agreement and the allegations in the complaint. An electronic copy of the full text of the consent agreement package can be obtained from the FTC website (for March 19, 2020), at this web address: <https://www.ftc.gov/news-events/commission-actions>.

You can file a comment online or on paper. For the Commission to consider your comment, we must receive it on or before April 24, 2020. Write “Danaher Corporation; File No. 191 0082” on your comment. Your comment—including your name and your state—will be placed on the public record of this proceeding, including, to the extent practicable, on the <https://www.regulations.gov> website.

Postal mail addressed to the Commission is subject to delay due to heightened security screening. As a result, we encourage you to submit your comments online through the <https://www.regulations.gov> website.

If you prefer to file your comment on paper, write “Danaher Corporation; File No. 191 0082” on your comment and on

the envelope, and mail your comment to the following address: Federal Trade Commission, Office of the Secretary, 600 Pennsylvania Avenue NW, Suite CC-5610 (Annex D), Washington, DC 20580; or deliver your comment to the following address: Federal Trade Commission, Office of the Secretary, Constitution Center, 400 7th Street SW, 5th Floor, Suite 5610 (Annex D), Washington, DC 20024. If possible, submit your paper comment to the Commission by courier or overnight service.

Because your comment will be placed on the publicly accessible website at <https://www.regulations.gov>, you are solely responsible for making sure that your comment does not include any sensitive or confidential information. In particular, your comment should not include any sensitive personal information, such as your or anyone else’s Social Security number; date of birth; driver’s license number or other state identification number, or foreign country equivalent; passport number; financial account number; or credit or debit card number. You are also solely responsible for making sure your comment does not include any sensitive health information, such as medical records or other individually identifiable health information. In addition, your comment should not include any “trade secret or any commercial or financial information which . . . is privileged or confidential”—as provided by Section 6(f) of the FTC Act, 15 U.S.C. 46(f), and FTC Rule 4.10(a)(2), 16 CFR 4.10(a)(2)—including in particular competitively sensitive information such as costs, sales statistics, inventories, formulas, patterns, devices, manufacturing processes, or customer names.

Comments containing material for which confidential treatment is requested must be filed in paper form, must be clearly labeled “Confidential,” and must comply with FTC Rule 4.9(c). In particular, the written request for confidential treatment that accompanies the comment must include the factual and legal basis for the request, and must identify the specific portions of the comment to be withheld from the public record. See FTC Rule 4.9(c). Your comment will be kept confidential only if the General Counsel grants your request in accordance with the law and the public interest. Once your comment has been posted on the public FTC website—as legally required by FTC Rule 4.9(b)—we cannot redact or remove your comment from the FTC website, unless you submit a confidentiality request that meets the requirements for such treatment under

FTC Rule 4.9(c), and the General Counsel grants that request.

Visit the FTC website at <http://www.ftc.gov> to read this Notice and the news release describing it. The FTC Act and other laws that the Commission administers permit the collection of public comments to consider and use in this proceeding, as appropriate. The Commission will consider all timely and responsive public comments that it receives on or before April 24, 2020. For information on the Commission’s privacy policy, including routine uses permitted by the Privacy Act, see <https://www.ftc.gov/site-information/privacy-policy>.

### Analysis of Agreement Containing Consent Order To Aid Public Comment Introduction

The Federal Trade Commission (“Commission”) has accepted, subject to final approval, an Agreement Containing Consent Orders (“Consent Agreement”) from Danaher Corporation (“Danaher”) designed to remedy the anticompetitive effects resulting from Danaher’s proposed acquisition of the GE Biopharma business of General Electric Company’s (“GE”) GE Healthcare Life Sciences division. Under the terms of the proposed Consent Agreement, Danaher is required to divest all of the rights and assets related to the following products to Sartorius AG (“Sartorius”): (1) Microcarrier beads; (2) conventional low-pressure liquid chromatography (“LPLC”) columns; (3) conventional LPLC skids; (4) single-use LPLC skids; (5) three affected chromatography resins; (6) LPLC continuous chromatography systems; (7) single-use TFF systems; and (8) label-free molecular characterization instruments.

The proposed Consent Agreement has been placed on the public record for thirty days for receipt of comments by interested persons. Comments received during this period will become part of the public record. After thirty days, the Commission will review the comments received and decide whether it should withdraw, modify, or make the Consent Agreement final.

Under the terms of the Equity and Asset Purchase Agreement dated February 25, 2019, Danaher will acquire the GE Biopharma business in exchange for \$21.4 billion (the “Acquisition”). The Commission’s Complaint alleges that the proposed Acquisition, if consummated, would violate Section 7 of the Clayton Act, as amended, 15 U.S.C. 18, and Section 5 of the Federal Trade Commission Act, as amended, 15 U.S.C. 45, by substantially lessening

competition in the markets for: (1) Microcarrier beads; (2) conventional low-pressure liquid chromatography ("LPLC") columns; (3) conventional LPLC skids; (4) single-use LPLC skids; (5) three affected chromatography resins; (6) LPLC continuous chromatography systems; (7) single-use TFF systems; and (8) label-free molecular characterization instruments. The proposed Consent Agreement will remedy the alleged violations by preserving the competition that otherwise would be lost in these markets as a result of the proposed Acquisition.

### The Parties

Headquartered in Washington, DC, Danaher is a leading global manufacturer of professional, medical, industrial, and commercial products and services through more than twenty operating companies. Danaher sells bioprocessing products primarily through its wholly owned subsidiary Pall Corporation ("Pall"), including instruments and consumables that support research, discovery, process development, and manufacturing workflows of biopharmaceutical drugs. Danaher sells other life science instruments, including molecular characterization used primarily in biopharmaceutical research applications, through its Molecular Devices, LLC operating company.

GE is a global conglomerate headquartered in Boston, Massachusetts. GE Biopharma is a division of GE Healthcare Life Sciences that manufactures and sells instruments, consumables, and software that support the research, discovery, process development, and manufacturing workflows of biopharmaceutical drugs.

### Products and Market Structures

#### I. Microcarrier Beads

Microcarrier beads are used in cell culture bioprocessing. They provide a surface for the anchorage of dependent cells to attach and grow in cell culture vessels and bioreactors. Danaher and GE are the two leading global suppliers of microcarrier beads and are each other's closest competitors. The only other significant supplier of microcarrier beads is Corning, Inc., which is substantially smaller than GE, the dominant supplier. The market for microcarrier beads is highly concentrated. The parties have a combined market share of greater than 70 percent. The Acquisition would increase concentration in the microcarrier bead market substantially

and reduce the number of major suppliers from three to two.

#### II. Conventional Low-Pressure Liquid Chromatography Columns

LPLC columns separate unwanted molecules by using a liquid or gaseous phase to carry the cell mass through an adsorbent serving as a stationary phase. Conventional LPLC columns are containers that hold chromatography resins used as the adsorbent during the stationary phase. These columns are made of glass, stainless steel, acrylic glass, or plastic. This market is highly concentrated, with only four main suppliers, including Danaher and GE. The parties have a combined market share of greater than 45 percent. Further, Danaher and GE are two of very few suppliers that offer larger, process-scale conventional LPLC columns, which is a segment of the market that is even more concentrated. Other remaining chromatography suppliers consist of fringe of firms, each of which account for a small share of the market.

#### III. Conventional Low-Pressure Liquid Chromatography Skids

Conventional LPLC skids control the flow of liquid in the chromatography process. Conventional LPLC skids contain a system of pumps, valves, sensors, tubing, electronic components, software, and flow paths composed of multi-use components. GE is the leading supplier of conventional LPLC skids with a market share of over 30 percent. Danaher and GE currently compete directly for sales in the market for conventional LPLC skids, and there are few other significant suppliers. The Acquisition would substantially increase concentration in the market for conventional LPLC skids.

#### IV. Single-Use Low Pressure Liquid Chromatography Skids

Single-use LPLC skids control the flow of liquid in the chromatography process and have the same function as conventional LPLC skids except that the flow path is composed of single-use components. As is the case for conventional ones, GE is the dominant supplier of single-use LPLC skids. According to market participants, in addition to GE and Danaher are two of only three significant suppliers. The only other suppliers are fringe firms with few sales. Danaher and GE have a combined market share of greater than 80 percent for single-use LPLC skids.

#### V. Chromatography Resins

Chromatography resins are chemically treated consumables that constitute the

stationary phase of the LPLC process. The parties both supply resins, although GE has a broad portfolio of resins while Danaher has more limited offerings. Each resin type differs in its chemical characteristics and features, and specific purification and production steps require different resins for the processing of particular molecules. Because of their distinct attributes and uses, each type of resin appears to constitute a distinct antitrust market. The parties have competitively significant overlaps in three resin markets: Affinity resins, ion exchange resins, and mixed mode resins. Affinity resins use binding interactions between a ligand and its binding partner to capture the target molecule. Ion exchange resins separate molecules based on their total electric charge. Mixed mode resins use matrices functionalized with ligands capable of multiple interactions that make this type of resin useful to purify target proteins when other methods fail.

Danaher and GE are two of a limited number of competitors in the markets for affinity, ion exchange, and mixed mode resins. Similar to the markets for chromatography hardware, GE is dominant in chromatography resins, holding market shares of between 65 and 73 percent, 57 and 65 percent, and 56 and 64 percent in affinity, ion exchange, and mixed mode resins, respectively, while Danaher's market share is significant but no greater than ten percent in each resin market.

#### VI. Low-Pressure Liquid Chromatography Continuous Chromatography Systems

A LPLC continuous chromatography system consists of a skid and columns that functions by regulating the flow of resins through the affixed columns in a continuous process that, for some uses, provides greater efficiency and cost savings. The parties, however, appear to be the leading suppliers in the market. Currently, Danaher has approximately 28 percent market share and GE has approximately 14 percent share. Only three other suppliers compete in this market, and the combined firm would have a market share of over 40 percent.

#### VII. Single-Use Tangential Flow Filtration Systems

Single-use TFF systems control the filtration process, which removes unwanted molecules during the cell growth phase of the bioprocessing workflow by running liquids through porous membranes. Single-use TFF systems include sensors, valves, safety and security items, software, and network communication hardware, as

well as flow kits, manifolds, and pumps composed of single-use components. Customers typically use TFF for cell clarification and for diafiltration, concentration, and microfiltration. TFF systems are configurable as conventional or single-use platforms. With single-use TFF systems, suppliers sell disposable flow kits (single-use tubing) that are used as a consumable. In contrast, conventional TFF systems are made with stainless steel and must be cleaned and validated after each use. Customers typically do not switch between single-use and conventional TFF systems, and they do not view other types of filtration systems as an economic or practical substitute for single-use TFF systems. Danaher and GE are two important competitors in the market for single-use TFF systems. GE's system has gained share since recently entering the market and currently competes closely with Danaher's system. The parties have a combined share of the single-use TFF filtration systems market of more than 35 percent.

#### *VIII. Label-Free Molecular Characterization Instruments*

Label-free molecular characterization instruments characterize protein binding interaction and protein concentration based on measurement of the optical, calorimetric, electrical, acoustic, and other physical reactions to various stimuli. Researchers use these instruments for a number of applications, including drug discovery and other biological research. Label-free molecular characterization instruments are a distinct relevant product market within the broader universe of molecular characterization instruments. By their own estimates Danaher has approximately 23 percent share and GE has about 39 percent leaving the combined firm with share greater than 60 percent. The remainder of the market is highly fragmented and consists of less established instrument manufacturers and firms offering niche products.

#### **Competitive Effects of the Acquisition**

The proposed Acquisition would likely result in substantial competitive harm to consumers in the markets for microcarrier beads; conventional LPLC columns; conventional LPLC skids; single-use LPLC skids; three chromatography resins; LPLC continuous chromatography systems; single-use TFF systems; and label-free molecular characterization. The parties are two of few significant suppliers of these products worldwide. Eliminating the head-to-head competition between Danaher and GE in these concentrated markets would allow the combined firm

to exercise market power unilaterally, likely resulting in higher prices, reduced innovation, and less choice for consumers.

#### **Entry Conditions**

*De novo* entry in the relevant markets would not be timely, likely, or sufficient in magnitude, character, and scope to deter or counteract the anticompetitive effects of the proposed Acquisition. Entry into each of the relevant product markets requires a significant amount of time and resources. In each relevant market, a new entrant would need to develop products with high levels of performance and reliability to establish the brand recognition necessary to compete effectively due to the premium customers place on suppliers' track records and reputations for reliable, high-quality products. Attaining requisite technological expertise and intellectual property often prevents suppliers from developing new products in the relevant markets. These barriers can delay the launch of new products and prevent existing suppliers of other equipment from developing new projects. Moreover, a potential entrant must establish a sufficient sales force that offers high-quality technical support and is capable of establishing relationships with customers. Such development efforts are difficult, time-consuming, and expensive, and often fail to result in a competitive product reaching the market.

#### **The Consent Agreement**

The Consent Agreement eliminates the competitive concerns raised by the proposed Acquisition by requiring Danaher to divest its microcarrier beads; chromatography hardware including conventional LPLC chromatography columns, conventional LPLC chromatography skids, and single-use LPLC chromatography skids; three chromatography resins; LPLC continuous chromatography systems; single-use TFF filtration systems; and label-free molecular characterization instruments to Sartorius. Danaher must divest all assets and rights to research, develop, manufacture, market, and sell these products, including all related intellectual property and other confidential business information, manufacturing technology, existing inventory, and all related agreements to manufacture and distribute the products. Additionally, to ensure that the divestiture is successful and to maintain continuity of supply, the proposed Order requires Danaher to supply Sartorius with these products for a limited time while Sartorius establishes its own manufacturing

capability. Further, the proposed Order requires Sartorius to seek the Commission's approval in the event that it seeks to sell certain divested assets or acquire certain assets that compete with the divested assets for a period of three years. The provisions of the Consent Agreement ensure that Sartorius becomes an independent, viable, and effective competitor to maintain the competition that currently exists.

Based in Göttingen, Germany, Sartorius is a leading provider of instruments, manufacturing systems, and associated consumables for the life sciences industry including bioprocessing equipment used for drug discovery, development, and commercialization. Sartorius's existing biopharma business includes products that are highly complementary to the divestiture assets. Sartorius has the expertise, worldwide sales infrastructure, and resources to restore the competition that otherwise would have been lost due to the proposed Acquisition.

Danaher must accomplish the divestitures no later than 45 days after consummating the proposed Acquisition or ten days after receiving all regulatory approvals necessary to consummate the divestiture. Until Danaher completes the divestiture, the proposed Order requires Danaher to hold separate the entire Pall operating company and the molecular characterization business, as well as to maintain the divested assets. Danaher is also required to submit compliance reports to staff and to the proposed monitor demonstrating compliance with these asset maintenance provisions.

If the Commission determines that Sartorius is not an acceptable acquirer, or that the manner of the divestitures is not acceptable, the proposed Order requires Danaher to unwind the sale of rights and assets to Sartorius and then divest the affected products to a Commission-approved acquirer within six months of the date the Order becomes final. To ensure compliance with the Order, the Commission has agreed to appoint a Monitor to ensure that Danaher complies with all of its obligations pursuant to the Consent Agreement and to keep the Commission informed about the status of the transfer of the product rights and assets to Sartorius. The proposed Order further allows the Commission to appoint a trustee in the event that Danaher fails to divest the products as required.

The purpose of this analysis is to facilitate public comment on the Consent Agreement, and it is not intended to constitute an official

interpretation of the proposed Order or to modify its terms in any way.

By direction of the Commission.

**April J. Tabor,**

*Acting Secretary.*

[FR Doc. 2020-06212 Filed 3-24-20; 8:45 am]

BILLING CODE 6750-01-P

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### Agency for Healthcare Research and Quality

#### Agency Information Collection Activities: Proposed Collection; Comment Request

**AGENCY:** Agency for Healthcare Research and Quality, HHS.

**ACTION:** Notice.

**SUMMARY:** This notice announces the intention of the Agency for Healthcare Research and Quality (AHRQ) to request that the Office of Management and Budget (OMB) approve the proposed information collection project “*Patient-Centered Outcomes Research Clinical Decision Support: Current State and Future Directions.*”

**DATES:** Comments on this notice must be received by 60 days after date of publication of this notice in the **Federal Register**.

**ADDRESSES:** Written comments should be submitted to: Doris Lefkowitz, Reports Clearance Officer, AHRQ, by email at [doris.lefkowitz@AHRQ.hhs.gov](mailto:doris.lefkowitz@AHRQ.hhs.gov).

Copies of the proposed collection plans, data collection instruments, and specific details on the estimated burden can be obtained from the AHRQ Reports Clearance Officer.

**FOR FURTHER INFORMATION CONTACT:**

Doris Lefkowitz, AHRQ Reports Clearance Officer, (301) 427-1477, or by emails at [doris.lefkowitz@AHRQ.hhs.gov](mailto:doris.lefkowitz@AHRQ.hhs.gov).

**SUPPLEMENTARY INFORMATION:**

#### Proposed Project

“*Patient-Centered Outcomes Research Clinical Decision Support: Current State and Future Directions*”

Research has shown that health care quality in the U.S. varies significantly and only half of adults receive evidence-based, recommended care. Individuals with multiple chronic conditions (42% of adults) and older adults are at particular risk for negative health outcomes. Current evidence shows that clinical decision support (CDS) systems improve adherence to evidence-based practices by analyzing patient data and

making appropriate information available to the physician at the time they need it. CDS systems are usually electronic health record (EHR)-based, encompassing tools like alerts, clinical guidelines, patient reports and dashboards, diagnostic support, and workflow tools. These tools help reduce clinical errors and allow for customization to patient needs, improving quality of care and patient outcomes.

The AHRQ Patient-Centered (PC) CDS Learning Network (PC CDS LN) defines PC CDS as: “CDS that supports *individual* patients and their approved care givers and/or care teams in health-related decisions and actions by leveraging information from PCOR findings and/or patient-specific information (e.g., patient-generated health data).” Through PC CDS, AHRQ seeks to accelerate the movement of patient-centered outcomes research (PCOR) evidence into practice and to make CDS more shareable, standards-based, and publicly available.

Traditionally, CDS initiatives have focused on provider-directed guidelines and increasing the shareability of CDS artifacts; however, PC CDS targets both patients (and/or caregivers) and providers.

AHRQ’s effort to support PC CDS has included efforts such as the PC CDS LN, CDS Connect, and other related grants and contracts. In this project, AHRQ seeks to conduct a comprehensive evaluation to assess the impact of AHRQ’s PCOR CDS Initiative (the Initiative) on understanding of the current state of PC CDS and to identify gaps to guide AHRQ’s future research.

This research has the following goal:

To assess the accomplishments and opportunities for the Initiative as a whole, and each of its four individual components: The PC CDS Learning Network, CDS Connect, Quantifying Efficiencies, and the U18 CDS Resource Grants.

This study is being conducted by AHRQ through its contractor, NORC at the University of Chicago, pursuant to AHRQ’s statutory authority to disseminate government-funded research relevant to comparative clinical effectiveness research. 42 U.S.C. 299b-37(a)-(c).

#### Method of Collection

To achieve these goals, the evaluation team will use key informant interviews and a web-based survey to gather information about the programs from stakeholders, contributors, and users of the CDS Initiative programs.

**Key Informant Interviews:** The evaluation team will conduct semi-

structured interviews with people involved in the Initiative’s components, including representatives from academia, industry, health systems, and government. Key informants will include the following groups:

**Leaders:** Includes AHRQ project officers, contractor’s senior staff, and senior consultants to Initiative components. Leaders are expected to have set the direction of the components or activities and to be familiar with the activities, the processes of implementation, and their outputs in their entirety.

**Contributors:** Includes lead authors or content developers for a product or output of a component, and may overlap with leaders. Examples of contributors from the PC CDS LN include lead authors of the Trust Framework, Opioid Action Plan, or Patient Blogs; examples from the CDS Connect include individuals who contributed CDS artifacts to the repository.

**Participants:** Includes individuals who participated in workgroups of either the PC CDS LN or CDS Connect, or participated in the development of one of the products.

**Consumers:** Includes individuals who have used a product developed by the Initiative, including artifacts found on the CDS Connect repository and the CDS Connect Authoring Tool in particular. Individuals will be identified from interviews with leaders, contributors, and participants, and through literature review for authors making references to Initiative products (i.e., reports or artifacts).

AHRQ and the evaluation contractor will create a list of eligible key informants that reflect the appropriate mix of roles and depth of experience to ensure comprehensive evaluation. Key informants will receive invitational emails that explain the scope and allow candidates to ask questions before declining or accepting the invitation. We will include clinical staff in our sample of participants in the Quantifying Efficiencies grant program, the U18 grants and the two opioid-related CDS projects. Involving staff at clinical sites will also be critical to understanding the value of PC CDS in the context of provider workflows and burdens.

**Web Survey:** The purpose of the web survey is to understand more about who the users of CDS Connect resources are, their reasons for using the resources, how they use these resources, and their perceptions about their value. The CDS Connect resources of interest include the CDS Authoring Tool, artifacts in the CDS Connect Repository and open-source CDS Connect resources available