



# Electronic Consultation Vendor Market Scan Report

January 2016



## Overview

Blue Shield of California Foundation (BSCF) recognizes the opportunity for safety net organizations to incorporate electronic consult (eConsult) messaging between primary care providers (PCPs) and specialists to reduce factors such as wait times for specialist consultations, volume of unnecessary face-to-face visits, costs of care, and disconnects in flow of communications between providers. eConsult holds the potential to enhance and improve overall patient experience and care.

eConsults demonstrate significant improvements in specialist input and in cost-effective care delivery for patients. If a face-to-face visit is deemed necessary following an eConsult, a specialist can convert the encounter to a referral. In addition, patients always have the option to seek specialist care.

## Purpose

The objective of this report is to provide information on currently available eConsult technology in order to inform healthcare organizations such as safety net hospitals and clinics throughout California that may be interested in incorporating such software solutions and workflows into their day-to-day operations.

This report is not an evaluation of vendors and not intended to be a comparative study. Instead, it offers an overview of vendor-provided information to help organizations understand the eConsult landscape, providing common technology requirements and insight into feature availability. This information may help healthcare organizations reduce upfront research when considering eConsult and move more quickly to engaging vendors and determining the best-fit solutions for their businesses.

## eConsult Definition

For the purposes of this document, eConsult is defined as<sup>1</sup>an asynchronous exchange initiated by the PCP to a specialist, with the specialist responding within a defined period of time in lieu of an in-person visit.

Ideally, these exchanges use structured templates developed and implemented within the electronic health or medical record (EHR/EMR) to create a seamless, point-of-care set of tools that facilitate higher quality coordination and communication between providers. However, during the market research process, it became evident that eConsult solutions are mostly offered outside the EHR but can integrate data from EHRs as needed.

## Market Analysis Research Methods

In order to gain an understanding of common features offered by eConsult technology vendors, BluePath Health requested responses to a requirements survey and a product demonstration from each

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<sup>1</sup> 1 Journal of Telemedicine and Telecare; Article – Electronic consultations (e-consults) to improve access to specialty care: A systematic review and narrative synthesis. Authors: Varsha G Vimalananda, Gorie Gupte, Siamak M Seraj, Jay Orlander, Dan Berlowitz, B Graeme Fincke and Steven R Simon.

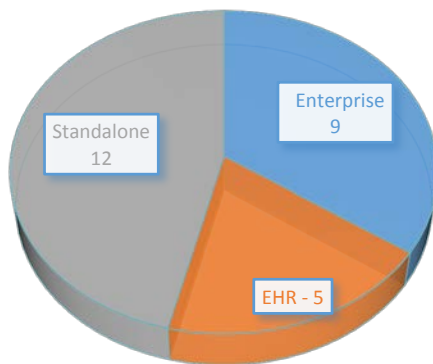
participating vendor. Requirements survey items were based on a combination of a review of current industry offerings and provider organization feedback, making the list of requirements as exhaustive as possible. Vendor demonstrations were based on a pre-set series of use cases that incorporated multiple levels of eConsult use, administration and reporting. The process for reviewing eConsult vendors included the following steps.

### eConsult Vendors

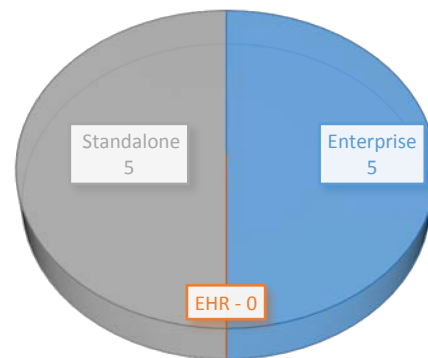
Initial research into vendors revealed that eConsult capabilities exist across three segments of the healthcare IT market. For the purposes of this report we define those segments as follows:

1. Stand-alone eConsult Solutions – Vendors that provide specific functionality and in many cases only eConsult (and/or eReferral) as the core product.
2. Electronic Health Records (EHR) – Vendors that provide full EHR functionality within which eConsult may be a component.
3. Enterprise/HIE/Care Management Platforms – Non-EHR vendors that provide a broad healthcare software offering such as HIE, Care Management platform, healthcare customer relationship management (CRM) or other with eConsult as just one component part of the whole.

### SURVEYED



### RESPONSES



It is important to note that no EHR vendors responded to the survey. While the survey received no responses from EHR vendors, we are aware that some form of eConsult functionality exists within various EHRs, despite that functionality in many cases not meeting the core functionality requirements noted within the survey. For example, use of the Direct messaging protocol often provides the ability for clinicians to initiate a consultation using an EHR system. Direct messaging is a way to securely send health information over the Internet. Also known as Direct Exchange, this protocol allows for simple, HIPAA-compliant, encrypted transmission of Protected Health Information to or from any Direct address. Orders, records, results, and any other documents can be easily and securely transmitted.



The Direct messaging protocol is inherent within all Meaningful Use Stage 2 certified EHR vendors and in some discussions was noted as an offering to bridge eConsult and EHR vendors. Discussions with a limited number of high visibility EHR vendors revealed that Direct messaging has limitations and may be offered as a work around solution in the interim period between a vendor offering full eConsult functionality or a healthcare organization selecting a tool that offers full eConsult features and functions.

## **Market Scan Findings**

For the purposes of the market scan, findings were placed into the following compartments:

1. Vendor Participants
2. System Infrastructure
3. Core eConsult Functionality
4. Integration (Product and Data)
5. Reporting
6. Services and Support

Each component offers an understanding of how vendors meet common requirements introduced for the market scan based on clinician and technology staff feedback within organizations participating in an eConsult grant program.



## Vendor Participants

Vendors that participated in the market scan process include the following:

Vendor	Product/Service Description	Product Name	Solution Type
<b>American Well</b>	Founded in 2007, American Well offers patients and providers access to complete telehealth services including immediate live video visits at any location.	Amwell	Enterprise – Care Management
<b>AristaMD</b>	Founded in 2014, AristaMD provides eConsult solutions to eliminate unnecessary specialty visits and reduce the cost of care, increases quality of care and improve access to care.	Referral Intelligence Platform	Stand-alone
<b>eCeptionist</b>	Founded in 2004, eCeptionist enables clients to reduce costs and optimize healthcare services using tools such as referral management, eConsult and telehealth services.	eCeptionist Referral	Enterprise - Telehealth
<b>MedUnison</b>	Founded in 2000, MedUnison provides Doc2Doc, helping to solve the challenges of the delivery of care facing most organizations today, ensuring collaborative communication throughout medical neighborhoods and enhancing access to specialty care in rural health settings.	DosSynergy Doc2Doc	Stand-alone
<b>Orion Health</b>	Founded over 23 years ago, Orion Health is on a mission to revolutionize the way healthcare is delivered. We believe that our software solutions, have the ability to give everyone healthier, happier and longer lives.	Orion Health Open Platform	HIE/Enterprise
<b>Referral MD</b>	Founded in 2011, ReferralMD’s mission is to standardize referral network communications across the healthcare continuum to reduce costs, improve patient access to care, and increase quality for the communities they serve.	ReferralMD	Stand-alone
<b>RubiconMD</b>	Founded in 2012, RubiconMD is a population health management solution that connects primary care providers to networks of top specialists for quick e-consults, bringing appropriate specialty expertise into the primary care setting. These e-consults eliminate avoidable referrals, improve existing referrals and enhance the patient and physician experience.	RubiconMD Platform	Stand-alone
<b>Safety Net Connect</b>	Since 2007 Safety Net Connect has provided a multitude of successful and nationally recognized web based healthcare solutions that serve the underserved and safety net populations.	eConsult	Stand-alone
<b>Salesforce</b>	Salesforce Health Cloud is setting a new standard for patient management software that goes beyond electronic medical records alone.	Health Cloud	Enterprise - CRM
<b>Stella Technology</b>	Founded in 2012, Stella Technology provides products and consulting services that enable clinicians and patients to ‘exchange, coordinate and collaborate’ Careination provides eConsult functionality with seamless integration into existing technology ecosystems.	Careination	Enterprise – Care Management



While pricing information was not sought for the purposes of this scan, vendors were polled for a high-level understanding of pricing models. All vendors offer a subscription model with potential by a select few to have a perpetual license model in the instance a healthcare organization may opt for that model. Specific vendor pricing and model discussions should be performed directly with vendors during any evaluation process by organizations to understand the best fit from a licensing and budget perspective.

Pricing options will vary based on healthcare organization size, integration needs and volume of end-users, along with specific services requested by clients.

### System Infrastructure

The vendor survey broke infrastructure into 2 segments:

1. Architecture/Solution Models
2. Privacy and Security

#### Architecture/Solution Models

All vendors offer a Software as a Service (SaaS)-based model allowing for lower upfront hardware costs and potential for reduced implementation timeframes based on pre-established cloud-based hosting of solutions. Where healthcare organizations may require a locally hosted model, that option is available with a subset of vendors.

Using the SaaS model, vendors indicated that solutions would work on any current computer with a standard internet connection and browser application. While vendors did not provide specific thresholds associated with minimum requirements for browsers, it is recommended to check with vendors prior to purchase and implementation to ensure organizations are compliant with minimum requirements.

In the case of locally hosted models, minimum hardware and software requirements generally met the following criteria:

Application Server CPU	2 X 2GHz
RAM	4GB
HDD	60GB
WIN 2008 or greater	
Database Server CPU	2 x 2GHz
RAM	4GB
HDD	100GB
Win 2008 or greater	
MS SQL R2 STD	

#### Privacy and Security

Vendors were surveyed for key attributes associated with data and application privacy and security.

All vendors reported HIPAA compliance and offer:

- Data encryption, while data is at rest in the database.



- User authentication, using user name and password security. Single sign on (SSO) is also addressed within the Integration section.
- Secure transmission of messaging using Secure Socket Layer (SSL) encryption.
- User audit trails for all access, views and transactions within the solutions.



### Core eConsult Functionality

Vendors met the majority of core functionality requirements provided as part of the survey. Based on clinician and healthcare administrator feedback, BluePath developed a minimum viable set of requirements. They included:

Application Requirement	Description	Vendors Meeting Requirement	Vendors w/Requirement on Roadmap
<b>Patient ID Matching</b>	Does the solution provide a universal patient identifier consistent with the EHR system?	100%	0%
<b>Payer Data Transmission</b>	Does the solution transmit payer data with eConsult messages?	80%	20%
<b>Patient Search</b>	Does the product offer a patient search capability?	80%	10%
<b>Template Customization by Specialty</b>	Does the product offer message customization by specialty?	90%	0%
<b>Message Urgency</b>	Can messages be flagged for urgency of the request by providers?	100%	0%
<b>Routing Rules Engine/Automation</b>	Does the solution offer a rules engine that will automatically send a request to a specialist based on his/her availability and the patient's criteria (e.g. insurance and geography)?	80%	20%
<b>Provider Status Change</b>	Does the solution offer specialty provider status changes in order to inform PCPs of specialist availability (e.g. not accepting new patients, on leave, etc.)?	90%	10%
<b>Clinical Guidelines</b>	Does the solution offer the ability to embed guidelines for use by referring providers?	100% <sup>2</sup>	0%
<b>Pre-Authorization Routing</b>	Does the solution provide the ability to communicate for pre-authorization in the event it may be required by a payer?	90%	10%
<b>Billing Coding</b>	Is there a capability built into the solution that offers coding for billing purposes?	70%	30%
<b>eConsult Reassignment/Decline</b>	Does the product provide the ability for Specialists to decline and/or redirect requests from PCPs?	100%	0%
<b>Patient Communications</b>	Does the product provide the ability for the PCP and specialist communications to incorporate the patient in the dialogue process?	30%	20%

<sup>2</sup> The inclusion of clinical guidelines involves varying levels of sophistication and customization based on the solution. It is advised to consult directly with vendors of interest as to specific capabilities since features range from in-depth pre-built clinical guideline templates to user build customization availability.





Based on review of surveys and demonstration observations, the market scan found just two areas in which 30% or more of eConsult vendors will require further consideration associated with features and functions. They are:

- Offering billing codes as part of the transaction data transfer process.

The majority of health plans do not currently reimburse for eConsults, making this component a “nice to have” for tracking and reporting at present. Where vendors reported that this capability does not exist, they did report it as a development roadmap item, meaning that within the next 6 months, vendors will have this capability included within their applications.

- Offering patient communication as part of the process.

This was the most significant gap across the entire scan process, although, it is noted that by mid-2016 50% of vendors will offer features that make this capability possible. Solutions meeting this requirement do so by offering the ability for PCPs to approve the inclusion of patients in the communications process.

Solutions commonly offered the ability to input a clinical question to be viewed and responded to by specialists. Vendors focus on 2 items:

- Keeping the consult initiation process simple as a means of limiting the number of additional workflow/process steps; and
- Offering clinical guidelines associated with the consult to ensure appropriateness of the request and sufficient detail provided to the specialist, in order to reduce the need for follow-up questions between specialist and PCP.

One item of notable interest within the core functionality set includes:

- Automation of routing varied by vendor. Offerings include routing based on combinations of PCP feedback from specialists, timeliness of responses and frequency of consults, amongst other characteristics that provided the ability to route consults to specialists. .

### Integration (Product and Data)

Integration was split into two areas for the purposes of the survey:

1. Systems integration
2. Data integration including scheduling integration and inclusion of specialist networks

### Systems Integration Landscape

Vendors provide the ability to integrate with EHRs and other systems within healthcare organizations. While the scan process could not determine how deeply embedded the eConsult solutions may be integrated within EHRs since EHR systems would be required in the demonstration process, at least one vendor offered a short video illustrating integration within a mainstream certified EHR system.

Requirements associated with systems integration included:

Application Requirement	Description	Vendors Meeting Requirement	Vendors w / Requirement on Roadmap
<b>EHR / HIE Integration</b>	Does the eConsult solution provide integration with external systems such as EHR and HIE?	100%	0%
<b>Single Sign On</b>	Does the solution offer single sign on capability from within EHR or other solutions (including context sensitivity)?	100%	0%

Of note is the ability for vendors to provide single sign on<sup>3</sup> (SSO). This is an advancement with many vendors during the last 12 months. SSO was reported in all cases to include context sensitivity associated with patient information, easing the burden associated with clinician workflow when moving between systems. Vendors reported the ability to have links available within EHR products as a means of keeping focus and workflow within one application environment while offering the use of the eConsult tool as a ‘pop-up’ screen as needed.

### Data Integration

Vendors were surveyed to gain an understanding of data integration capabilities and what formats are supported in the transport of data between systems. Common formats included:

- CCDA for clinical documentation of continuity of care
- HL7 2.X, XML and API connectors for the transport of demographics and clinical data

The survey focused on demographic and treatment history data integration primarily since these data drive the ability for the specialist to have a clear picture of the patient and care need. All vendors reported the ability to integrate demographic and clinical data within their solutions.

While appointment linkage is not a critical component within the workflow for eConsult, the survey sought an understanding of the potential for escalation of the consult to a referral appointment between a patient and specialist. Several products stated that appointment linkage is available.

<sup>3</sup> Single Sign On controls access to multiple related, but independent, software systems. With SSO, a user logs in with a single ID and password to gain access to a connected system or systems without using different usernames or passwords, or, in some configurations, seamlessly signs on at each system.

<b>Data Integration Requirement</b>	<b>Description</b>	<b>Vendors Meeting Requirement</b>	<b>Vendors w / Requirement on Roadmap</b>
<b>Demographics</b>	Are patient demographics imported into the solution? Provides ongoing linkage between solution and EHR?	100%	0%
<b>Medications</b>	Can treatment history data contain medication data?	100%	0%
<b>Orders/Results Data</b>	Can orders and results data from the EHR be attached to eConsult requests?	100%	0%
<b>Clinical Images</b>	Does the solution offer the ability to attach images?	100%	0%
<b>Clinical Documentation</b>	Does the solution offer the ability to store and forward clinical documentation integrated via an EHR or other system?	100%	0%
<b>Appointment Linkage</b>	Does appointment linkage with the specialist exist in order for the PCP office to identify and confirm an appointment date for a face-to-face with the specialist?	60%	40%
<b>Specialist Network inclusion</b>	Do systems offer supplemental access to specialist networks in addition to local facility specialists?	40%	0%

Vendors commonly indicated that data integration occurs on a project-by-project basis, with specific data elements requiring analysis based on the EHR or other data system with which the eConsult system will integrate.

### Reporting

The majority of systems offer the ability to produce reports associated with productivity and compliance and offer dashboards for the purposes of management reporting and gap analysis. Many tools offer features that include graphical views into data reports while some systems rely on data export functionality to business intelligence and reporting tools that may exist outside of the immediate eConsult offering for the purposes of graphical reporting. Requirements sought for reporting included:

Application Requirement	Description	Vendors Meeting Requirement	Vendors w / Requirement on Roadmap
<b>Activity Reports</b>	Does the solution provide activity reporting by specialty (e.g. volume of consults, conversion to in-person visits)?	100%	0%
<b>Process Measure Reports</b>	Does the solution offer the ability to report on turnaround time and other process measures?	100%	0%
<b>eConsult Backlog Reports</b>	Does the product offer backlog / queue reporting?	100%	0%
<b>Financial/Billing Code Reporting</b>	Does the product provide reporting associated with codes for billing purposes?	40%	60%
<b>Ad Hoc Reporting for End Users</b>	Does the product provide ad hoc reporting capabilities using selection items within the app?	90%	10%
<b>Data Exports for 3<sup>rd</sup> Party Use</b>	Does any data export capability exist, for example, for use with data warehousing within large facilities?	100%	0%

## Services and Support

Vendors were surveyed to gain an understanding of implementation and training services, in addition to support models offered. Like other health IT systems such as EHRs, vendors offered common approaches to implementation, training and support.

### Implementation Services

Vendors will commonly tailor implementation services on a client-by-client basis with consideration to budget, organization size and project approach. Findings from the survey illustrated that common implementation services were offered across the board by vendors as a means of supporting rapid deployment and balanced consideration towards requirements, workflow, system setup and data integration.

Project Mgmt	Requirements Gathering	System Setup	Integration with EHR	Testing	Training	Go Live Support
Yes	Yes	Yes	Yes	Yes	Yes	Yes



Implementation timelines commonly fall in the 90-120 day range based on organization type and volume of users. Specific timelines will be developed for clients during the sales process as pre-implementation planning takes place.

### Training Models

Training models were comprehensive with respondents incorporating a broad range of in-person and remote training capabilities. Training is also tailored on a client-by-client basis and budgeted in a similar fashion.

Instructor Led	Live Webinar	Recorded Webinar	Online/On Demand Training	Knowledgebase Access
Yes	Yes	Yes	Yes	Yes

### System Support

All vendors provide a 24-hour, 7-days-per-week system support model, offering clients comprehensive coverage. Additionally, vendors offer access to a knowledge base, similar to the training model, as a means of on-demand self-help for end-user support on usability related items.

System updates ranged between one update per month to three updates per year. Vendors commonly provide release notes to clients in advance of updates, allowing for communications to end-users within each organization.

### Conclusions

Vendors participating in the market scan offer progressively robust technology allowing the incorporation of eConsult into the healthcare environment, considering consistency of workflow and ease of access to information by both PCPs and specialists.

The most significant gap identified during the market scan was that of EHR vendors lacking common functionality or the ability to customize eConsult functionality within the EHR to meet the unique needs of each client. While use of Direct messaging is available amongst EHR systems, the drawback of using this as a sole means of eConsult functionality is the lack of closed-loop tracking, reporting and reconciliation of electronic consultations back to the patient chart in a fluid manner. Stand-alone solutions and Enterprise / HIE solutions meet this capability very clearly, providing bi-directional data integration to maximize data flow for clinicians. It is important to note that all solutions reviewed require data integration with EHRs to incorporate eConsult into day-to-day workflow effectively.

APPENDIX 1  
Electronic Consultation  
Market Scan Vendor Profiles  
January 8, 2016  

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Revision 1 – February 23, 2016



CALIFORNIA  
HEALTHCARE  
FOUNDATION



# American Well

COMPANY INFORMATION	PRODUCT & LICENSING MODEL	DATA INTEGRATION	
<ul style="list-style-type: none"> <li>Based - Boston, MA</li> <li>In business 9 years</li> <li>200+ staff</li> <li>&gt; 25 million patients using product</li> <li>Product online since 2007</li> </ul>	<ul style="list-style-type: none"> <li>SaaS - Cloud-based, vendor hosted</li> <li>Subscription and Perpetual License models available based on client and types of services selected</li> </ul>	<ul style="list-style-type: none"> <li>Bi-directional API integration with EMR/EHR, including but not limited to clinical data (medications, medical claims history, biometrics, gaps in care, etc.) as well as eligibility and scheduling information</li> <li>real-time EDI interfaces for integration with 3rd parties (APIs)</li> </ul>	
PRODUCT NAME	CORE FEATURES		SECURITY & PRIVACY
<ul style="list-style-type: none"> <li>Amwell or White Labeled</li> </ul>	<ul style="list-style-type: none"> <li>Supports universal patient ID (searchable) with EHR</li> <li>Payer data transmission enabled</li> <li>Message customization by specialty</li> <li>Message urgency flagging</li> <li>Rules engine for consult distribution</li> <li>Single sign-on supported</li> <li>Specialty Provider search and status changes</li> <li>Guidelines embedding</li> <li>Treatment History information enabled</li> <li>Problem/Response template customization by Specialty</li> <li>Pre-authorization checking</li> <li>Billing coding</li> </ul>		<ul style="list-style-type: none"> <li>User authentication</li> <li>Secure messaging</li> <li>Data encryption</li> </ul>
SERVICE & SUPPORT			HARDWARE / SOFTWARE REQUIREMENTS
<ul style="list-style-type: none"> <li>Best Practices guidelines offered during implementation</li> <li>Project Management, Requirements Gathering, System Setup, Integration with Existing EMR/EHR, Testing, Training, Go-Live Support</li> <li>Training: In-person instructor-led, Live webinar, Recorded webinar, Online training</li> <li>24 – 7 support by employed staff</li> <li>Updates on a scheduled basis</li> </ul>			<ul style="list-style-type: none"> <li>Any computer, mobile device, telephone, or American Well Kiosk</li> <li>No specific bandwidth considerations unless deploying to a kiosk based setting</li> </ul>
REPORTING & ANALYTICS		NOTABLE CLIENTS/TESTIMONIALS	
<ul style="list-style-type: none"> <li>Audit reporting</li> <li>Activity reporting by specialty</li> <li>Ad hoc reporting</li> <li>Process measures</li> <li>Billing code reports</li> <li>Data warehouse exporting</li> </ul>			

# AristaMD

COMPANY INFORMATION	PRODUCT & LICENSING MODEL	DATA INTEGRATION	
<ul style="list-style-type: none"> <li>Based – La Jolla, CA</li> <li>In business 1.5 years</li> <li>17 staff, 15 consultants (plus contracted specialists)</li> <li>&gt; 250 users</li> <li>Product online since February 2015</li> </ul>	<ul style="list-style-type: none"> <li>SaaS - Cloud-based, vendor hosted</li> <li>Subscription pricing model.</li> </ul>	<ul style="list-style-type: none"> <li>EHR and HIE integration using open APIs using JSON, HL7 or direct messaging.</li> <li>Partnership with experienced integration platform companies to expedite implementation of interoperable solution.</li> <li>Integration includes: Demographics, medications, allergies, chronic conditions, labs, radiology results, other diagnostics; based on client needs and capabilities of client EHR.</li> </ul>	
PRODUCT NAME	CORE FEATURES		SECURITY & PRIVACY
<ul style="list-style-type: none"> <li>Referral Intelligence Platform</li> </ul>	<ul style="list-style-type: none"> <li>Supports universal patient ID (searchable) with EHR integration</li> <li>Message urgency flagging</li> <li>Message customization by specialty</li> <li>Rules Engine for consult distribution</li> <li>Single Sign On</li> </ul>		<ul style="list-style-type: none"> <li>User authentication</li> <li>Secure messaging</li> <li>Data encryption</li> </ul>
SERVICE & SUPPORT	<ul style="list-style-type: none"> <li>Specialty Provider search and status changes</li> <li>Guidelines embedding</li> <li>Provider Treatment History information enabled</li> <li>Problem / Response template customization by Specialty</li> <li>Pre-authorization checking</li> <li>Patient communications w/PCP approval.</li> </ul>		HARDWARE / SOFTWARE REQUIREMENTS
<ul style="list-style-type: none"> <li>Best Practices guidelines offered during implementation</li> <li>Project Management, Requirements Gathering, System Setup, Integration with Existing EMR/EHR, Testing, Training, Go-Live Support</li> <li>Training: In-person instructor-led, Live webinar, Recorded webinar, Online training</li> <li>24 – 7 support using employed staff</li> <li>Monthly product updates</li> </ul>			<ul style="list-style-type: none"> <li>Any computer, mobile device, telephone supporting browser access.</li> <li>No specific bandwidth considerations.</li> </ul>
REPORTING & ANALYTICS		NOTABLE CLIENTS/TESTIMONIALS	
<ul style="list-style-type: none"> <li>Audit reporting</li> <li>Activity reporting by specialty</li> <li>Ad hoc reporting</li> <li>Process measures</li> <li>Data warehouse exporting</li> </ul>			



# eCeptionist

COMPANY INFORMATION	PRODUCT & LICENSING MODEL	DATA INTEGRATION	
<ul style="list-style-type: none"> <li>Based – Houston, TX</li> <li>In business 14 years</li> <li>40 staff</li> <li>&gt; 30 clients</li> <li>Product online since 2006</li> </ul>	<ul style="list-style-type: none"> <li>SaaS - Cloud-based, vendor hosted</li> <li>Client hosted option</li> <li>Subscription pricing model.</li> </ul>	<ul style="list-style-type: none"> <li>Supports HL7 feed. Partly dependent on EMR/EHR capability to push data feed. Patient data, medication, lab results, other PHI as supported by HL7)</li> <li>Integrated with Meditech, Allscripts, Cerner, Epic, iSoft, Orion Health Portal, IDX, McKesson, GE, Egate, Eclipsys, Profiler, DEERS (US Military), Orion Rhapsody, and Client’s Custom built systems</li> <li>Integration includes: Demographics, medications, allergies, chronic conditions, labs, radiology results, other diagnostics; based on client needs and capabilities of client EHR.</li> </ul>	
PRODUCT NAME	CORE FEATURES		SECURITY & PRIVACY
<ul style="list-style-type: none"> <li>Triage &amp; Referral Management</li> </ul>	<ul style="list-style-type: none"> <li>Rules Engine for consult distribution</li> <li>Single Sign On (EHR dependent)</li> </ul>		<ul style="list-style-type: none"> <li>User authentication</li> <li>Secure messaging</li> <li>Data encryption</li> </ul>
SERVICE & SUPPORT	<ul style="list-style-type: none"> <li>Supports universal patient ID (searchable) with EHR integration</li> <li>Payer data transmission available</li> <li>Message urgency flagging</li> <li>Message customization by specialty</li> </ul>		HARDWARE / SOFTWARE REQUIREMENTS
<ul style="list-style-type: none"> <li>Best Practices guidelines offered during implementation</li> <li>Project Management, Requirements Gathering, System Setup, Integration with Existing EMR/EHR, Testing, Training, Go-Live Support</li> <li>Training: In-person instructor-led, Live webinar, knowledge base available</li> <li>7 to 7 business hours support using employed staff</li> <li>2 major updates per year with client notification 30 days in advance</li> </ul>			<ul style="list-style-type: none"> <li>Any computer, mobile device, telephone supporting browser access.</li> <li>No specific software requirements for SaaS model</li> <li>No specific bandwidth considerations.</li> <li>Client hosted model requires Win Server 2008 or greater</li> </ul>
REPORTING & ANALYTICS		NOTABLE CLIENTS/TESTIMONIALS	
<ul style="list-style-type: none"> <li>Audit reporting</li> <li>Activity reporting by specialty</li> <li>Ad hoc reporting</li> </ul>		<ul style="list-style-type: none"> <li>Billing code reports (not out of box)</li> <li>Process measures</li> <li>Data warehouse exporting (not out of box)</li> </ul>	

# MedUnison

COMPANY INFORMATION	PRODUCT & LICENSING MODEL	DATA INTEGRATION	
<ul style="list-style-type: none"> <li>Based – Oklahoma City, OK</li> <li>Founded in 2000</li> <li>Undisclosed number of staff</li> <li>Undisclosed number of users</li> <li>eConsult product online since 2001</li> </ul>	<ul style="list-style-type: none"> <li>SaaS - Cloud-based, vendor hosted</li> <li>Subscription pricing model</li> </ul>	<ul style="list-style-type: none"> <li>Interface points between Doc2Doc™ and existing EHRs can be as complex as full patient data load, order entry, and referral status updates or as simple as manual creation of the referral in Doc2Doc™ along with attached CCDs or PDFs from the EHR</li> <li>Integration includes: demographics, medications, allergies, chronic conditions, labs, radiology results, other diagnostics; based on client needs and capabilities of client EHR</li> </ul>	
PRODUCT NAME	CORE FEATURES		SECURITY & PRIVACY
<ul style="list-style-type: none"> <li>DocSynergy™ Doc2Doc™</li> </ul>	<ul style="list-style-type: none"> <li>Supports universal patient ID (searchable) with EHR integration</li> </ul>		<ul style="list-style-type: none"> <li>User authentication</li> <li>Secure messaging</li> <li>Data encryption</li> </ul>
SERVICE & SUPPORT	<ul style="list-style-type: none"> <li>Payer data transmission enabled</li> <li>Message customization by specialty</li> <li>Message urgency flagging</li> <li>Provider Treatment History information enabled</li> <li>Rules Engine for consult distribution, transition to referral</li> <li>Specialty Provider search and status changes</li> </ul>		<b>HARDWARE / SOFTWARE REQUIREMENTS</b>
<ul style="list-style-type: none"> <li>Best Practices guidelines offered during implementation and knowledge base offered</li> <li>Project Management, Requirements Gathering, System Setup, Integration with Existing EMR/EHR, Testing, Training, Go-Live Support</li> <li>Training: In-person instructor-led, Live webinar, Recorded webinar, Online training</li> <li>24 – 7 support using employed staff</li> <li>Monthly updates with 2x per year major releases</li> </ul>	<ul style="list-style-type: none"> <li>Guidelines embedding</li> <li>Pre-authorization checking</li> <li>Centralized specialty routing facilitated</li> <li>Decline/Redirect enabled</li> <li>Billing coding</li> <li>Problem/Response template customization by Specialty</li> <li>Appointment linkage for in-person visits</li> <li>Patient communications w/PCP approval</li> <li>Single sign-on</li> </ul>		<ul style="list-style-type: none"> <li>Any computer, mobile device, telephone supporting browser access</li> <li>No specific bandwidth considerations</li> </ul>
REPORTING & ANALYTICS		NOTABLE OBSERVATIONS OR CLIENTS/TESTIMONIALS	
<ul style="list-style-type: none"> <li>Audit reporting</li> <li>Process measures</li> <li>Activity reporting by specialty</li> <li>Backlog reporting</li> <li>Financial reporting</li> <li>Ad hoc reporting</li> <li>Data exporting for 3d party analytics/reporting</li> </ul>			

# Orion Health

COMPANY INFORMATION	PRODUCT & LICENSING MODEL	DATA INTEGRATION	
<ul style="list-style-type: none"> <li>Based – Santa Monica, CA</li> <li>Founded in 1992</li> <li>1200 employees</li> <li>Several large national clients</li> <li>eConsult product online since 2005</li> </ul>	<ul style="list-style-type: none"> <li>SaaS - Cloud-based, vendor hosted</li> <li>Perpetual license; moving to subscription pricing model in 2015.</li> </ul>	<ul style="list-style-type: none"> <li>Integration for EHR and HIE includes: Wide variety of payer and clinical data - acquired and stored in the application; messaged based, demographics, encounters, medications, immunizations, problems, procedures, PCP history, visit history, eligibility, diagnosis</li> <li>Uses HL7, CCD, CCDA, API</li> <li>Includes imaging data, orders &amp; results</li> </ul>	
PRODUCT NAME	CORE FEATURES		SECURITY & PRIVACY
<ul style="list-style-type: none"> <li>Orion Health Open Platform</li> </ul>	<ul style="list-style-type: none"> <li>Supports universal patient ID (searchable) with EHR integration</li> <li>Payer data transmission enabled</li> <li>Message customization by specialty</li> <li>Message urgency flagging</li> <li>Provider Treatment History information enabled</li> <li>Rules engine for consult distribution</li> <li>Specialty Provider search and status changes</li> </ul>		<ul style="list-style-type: none"> <li>User authentication</li> <li>Secure messaging</li> <li>Data encryption</li> </ul>
SERVICE & SUPPORT			HARDWARE / SOFTWARE REQUIREMENTS
<ul style="list-style-type: none"> <li>Best Practices guidelines offered during implementation and knowledge base offered</li> <li>Project Management, Requirements Gathering, System Setup, Integration with Existing EMR/EHR, Testing, Training, Go-Live Support</li> <li>Training: In-person instructor-led, Live webinar, Recorded webinar, Online training</li> <li>24-7 support using employed staff</li> <li>Updates provided on a continuous delivery basis</li> </ul>	<ul style="list-style-type: none"> <li>Any computer, mobile device, telephone supporting browser access</li> <li>No specific bandwidth considerations</li> </ul>		
REPORTING & ANALYTICS		NOTABLE CLIENTS/TESTIMONIALS	
<ul style="list-style-type: none"> <li>Audit reporting</li> <li>Process measures</li> <li>Activity reporting by specialty</li> <li>Backlog reporting</li> <li>Ad hoc reporting</li> <li>Data exporting for 3d party analytics/reporting</li> </ul>			

# ReferralMD

COMPANY INFORMATION	PRODUCT & LICENSING MODEL	DATA INTEGRATION		
<ul style="list-style-type: none"> <li>Based – San Francisco, CA</li> <li>Founded in 2011</li> <li>eConsult product online since 2013</li> </ul>	<ul style="list-style-type: none"> <li>SaaS - Cloud-based, vendor hosted</li> <li>Subscription pricing model</li> </ul>	<ul style="list-style-type: none"> <li>Integration for EHR and HIE includes: demographics, encounters, medications, immunizations, problems, procedures, PCP history, visit history, eligibility, diagnosis</li> <li>Uses API, HL7, LDAP, XML</li> <li>Includes imaging data, orders &amp; results</li> </ul>		
PRODUCT NAME	CORE FEATURES		SECURITY & PRIVACY	
<ul style="list-style-type: none"> <li>ReferralMD</li> </ul>	<ul style="list-style-type: none"> <li>Supports universal patient ID (searchable) with EHR integration</li> <li>Payer data transmission enabled</li> <li>Message customization by specialty</li> <li>Message urgency flagging</li> <li>Provider Treatment History information enabled</li> <li>Roadmap item - Rules Engine for consult distribution</li> <li>Specialty Provider search and status changes</li> <li>E-Consultation (Pre-referral communication with specialist)</li> </ul>		<ul style="list-style-type: none"> <li>User authentication</li> <li>HIPAA secure messaging</li> <li>Data encryption</li> </ul>	
SERVICE & SUPPORT			<ul style="list-style-type: none"> <li>Clinical guideline workflows</li> <li>Pre-authorization checking</li> <li>Centralized specialty routing facilitated.</li> <li>Decline/Redirect enabled.</li> <li>Problem / Response template customization by Specialty</li> <li>Patient communications w/PCP approval.</li> <li>PCP &amp; Specialist document upload (Dicom support)</li> <li>Single Sign On</li> </ul>	HARDWARE / SOFTWARE REQUIREMENTS
<ul style="list-style-type: none"> <li>Best Practices guidelines offered during implementation and knowledge base offered</li> <li>Project Management, Requirements Gathering, System Setup, Integration with Existing EMR/EHR, Testing, Training, Go-Live Support</li> <li>Training: In-person instructor-led, Live webinar, Recorded webinar, Online training</li> <li>24-7 support using employed staff</li> <li>Updates provided bi-weekly with no downtime</li> </ul>	<th data-bbox="48 999 1112 1053">REPORTING &amp; ANALYTICS</th> <th data-bbox="1112 999 1877 1053">NOTABLE CLIENTS/TESTIMONIALS</th>		REPORTING & ANALYTICS	NOTABLE CLIENTS/TESTIMONIALS
<ul style="list-style-type: none"> <li>Audit reporting</li> <li>Process measures</li> <li>Activity reporting by specialty</li> </ul>	<ul style="list-style-type: none"> <li>Referral trend reporting</li> <li>Backlog reporting</li> <li>Ad hoc reporting</li> <li>Data exporting for 3d party analytics/reporting</li> </ul>	<ul style="list-style-type: none"> <li>Glendale MRI</li> <li>Texas Institute of Neurological Disorders</li> </ul>		

# RubiconMD

COMPANY INFORMATION	PRODUCT & LICENSING MODEL	DATA INTEGRATION	
<ul style="list-style-type: none"> <li>Based – New York, NY</li> <li>Founded in 2013</li> <li>9 employees</li> <li>24 clients online</li> <li>eConsult product online since 2014</li> </ul>	<ul style="list-style-type: none"> <li>SaaS - Cloud-based, vendor hosted with client hosted offering available</li> <li>Subscription pricing model</li> </ul>	<ul style="list-style-type: none"> <li>Integration includes: demographics, medications, allergies, chronic conditions, labs, radiology results, other diagnostics; based on client needs and capabilities of client EHR</li> <li>Uses HL7 and has integrated directly with APIs</li> </ul>	
PRODUCT NAME	CORE FEATURES		SECURITY & PRIVACY
<ul style="list-style-type: none"> <li>RubiconMD Platform</li> </ul>	<ul style="list-style-type: none"> <li>Supports universal patient ID (searchable) with EHR integration</li> <li>Embeds into EHR with seamless integration</li> <li>Roadmap item - Payer data transmission enabled</li> <li>Message customization by specialty</li> <li>Roadmap - Message urgency flagging</li> <li>Provider Treatment History information enabled</li> <li>Rules engine for consult distribution</li> <li>Specialty Provider search and status changes not required</li> </ul>		<ul style="list-style-type: none"> <li>User authentication</li> <li>Secure messaging</li> <li>Data encryption</li> </ul>
SERVICE & SUPPORT			HARDWARE / SOFTWARE REQUIREMENTS
<ul style="list-style-type: none"> <li>Knowledge base offered</li> <li>Project Management, Requirements Gathering, System Setup, Integration with Existing EMR/EHR, Testing, Training, Go-Live Support</li> <li>Training: In-person instructor-led, Live webinar, Online training</li> <li>24 – 7 support using employed staff</li> <li>Monthly updates</li> </ul>	<ul style="list-style-type: none"> <li>Guidelines embedding</li> <li>Roadmap - Pre-authorization checking</li> <li>Decline/Redirect enabled</li> <li>Roadmap - Billing coding</li> <li>Problem/Response template customization by Specialty</li> <li>Patient communications w/PCP approval</li> <li>Single sign-on</li> <li>Algorithms reduce turnaround time and allocation of eConsults to specialists</li> <li>Company-supplied specialist panels, reducing need for urgent requests and backlog</li> </ul>		<ul style="list-style-type: none"> <li>Any computer, mobile device, telephone supporting browser access</li> <li>No specific bandwidth considerations</li> </ul>
REPORTING & ANALYTICS			NOTABLE CLIENTS/TESTIMONIALS
<ul style="list-style-type: none"> <li>Audit reporting</li> <li>Process measures</li> <li>Activity reporting by specialty</li> <li>Admin function</li> </ul>	<ul style="list-style-type: none"> <li>Backlog reporting not required</li> <li>Roadmap - financial reporting</li> <li>Roadmap - Ad hoc reporting</li> <li>Data exports</li> </ul>		<ul style="list-style-type: none"> <li>“In general, the quality of the RubiconMD responses exceeds those I get over the phone or via referral process.”</li> <li>“Answered a VERY difficult question using clear logic. [RubiconMD] will affect my management of this issue going forward.”</li> </ul>

# SafetyNet Connect

COMPANY INFORMATION	PRODUCT & LICENSING MODEL	DATA INTEGRATION		
<ul style="list-style-type: none"> <li>Based – Newport Beach, CA</li> <li>Founded in 2009</li> <li>20 employees</li> <li>8 clients</li> <li>eConsult product online since June 2009</li> <li>Deployed Across the 2<sup>nd</sup> largest health system in the US</li> <li>Over 500,000 consults/referrals</li> </ul>	<ul style="list-style-type: none"> <li>SaaS - Cloud-based, vendor hosted</li> <li>Subscription pricing model.</li> </ul>	<ul style="list-style-type: none"> <li>ONC DIRECT enabled.</li> <li>Integration includes: demographics, medications, allergies, chronic conditions, labs, radiology results, other diagnostics; based on client needs and capabilities of client HER</li> <li>Industry Standard Formats (HL7, 834, 837) and Custom Data feeds</li> <li>Experience with Cerner specifically noted</li> </ul>		
PRODUCT NAME	CORE FEATURES		SECURITY & PRIVACY	
<ul style="list-style-type: none"> <li>eConsult</li> </ul>	<ul style="list-style-type: none"> <li>Supports universal patient ID (searchable) with EHR integration</li> <li>Payer data transmission enabled</li> <li>Message customization by specialty</li> <li>Message urgency flagging</li> <li>Provider Treatment History information enabled</li> <li>Rules Engine for consult distribution</li> <li>Specialty Provider search and status changes</li> <li>Specialty network Guidelines embedding</li> </ul>		<ul style="list-style-type: none"> <li>User authentication</li> <li>Secure messaging</li> <li>Data encryption</li> <li>HIPAA Compliant 164.308 to 164.314 Standards</li> <li>PCI-DSS Compliant (RI3PA program)</li> <li>SOC2 Compliant</li> </ul>	
SERVICE & SUPPORT			<ul style="list-style-type: none"> <li>Best Practices guidelines offered during implementation and knowledge base offered</li> <li>Implementation Services tailored by client but may include Project Management, Requirements Gathering, System Setup, Integration with Existing EMR/EHR, Testing, Training, Go-Live Support</li> <li>Training: In-person instructor-led, Live webinar, Recorded webinar, Online training</li> <li>24 – 7 support using employed staff</li> <li>Updates performed on scheduled basis</li> </ul>	HARDWARE / SOFTWARE REQUIREMENTS
			<ul style="list-style-type: none"> <li>PC Config: 1.0 GHz or faster, &gt; 2GB RAM, HDD 100GB+; Graphics Card; Windows 7 OS (or better); Ethernet Cards 10/100/1000 Mbps . MAC Reqs available</li> <li>Bandwidth Minimum of download/upload speed of 40kbps/40kbp</li> </ul>	
REPORTING & ANALYTICS		NOTABLE OBSERVATIONS OR CLIENTS/TESTIMONIALS		
<ul style="list-style-type: none"> <li>Audit reporting</li> <li>Tableau Dashboard - Real Time Analytics</li> <li>Process measures</li> <li>Activity reporting by specialty</li> <li>Backlog reporting</li> <li>Ad hoc reporting provided on request</li> <li>Data exporting for 3d party analytics/reporting</li> <li>Data Mart</li> </ul>		<p>Mitch Katz, MD The Director of DHS Los Angeles County, “For our patients, it means better access to specialty care often without having to travel. For our primary care providers, it means a rapid and direct communication with the specialist and updates on the best way to treat difficult problems. For our specialists, it means seeing the patients for whom they can add the most value. eConsult is also an important initiative because it encompasses all of DHS as well as our Community Partners.”</p>		

# Salesforce

COMPANY INFORMATION	PRODUCT & LICENSING MODEL	DATA INTEGRATION	
<ul style="list-style-type: none"> <li>Based – San Francisco, CA</li> <li>Founded in 2000</li> <li>18,000 employees</li> <li>Undisclosed number of users</li> </ul>	<ul style="list-style-type: none"> <li>SaaS - Cloud-based, vendor hosted</li> <li>Subscription pricing model.</li> </ul>	<ul style="list-style-type: none"> <li>Can Integrate any EHR data: demographics, medications, allergies, chronic conditions, labs, radiology results, other diagnostics; based on client needs and capabilities of client EHR</li> <li>Uses HL7 and other formats</li> <li>Noted EPIC and Cerner as two of many systems integrated with</li> </ul>	
PRODUCT NAME	CORE FEATURES		SECURITY & PRIVACY
<ul style="list-style-type: none"> <li>Service Cloud or Health Cloud</li> </ul>	<ul style="list-style-type: none"> <li>Supports universal patient ID (searchable) with EHR integration</li> <li>Payer data transmission enabled</li> <li>Message customization by specialty</li> <li>Message urgency flagging</li> <li>Provider Treatment History information enabled</li> <li>Rules Engine for consult distribution</li> <li>Specialty Provider search and status changes</li> <li>Guidelines embedding</li> </ul>		<ul style="list-style-type: none"> <li>User authentication</li> <li>Secure messaging</li> <li>Data encryption (optional)</li> </ul>
SERVICE & SUPPORT			HARDWARE / SOFTWARE REQUIREMENTS
<ul style="list-style-type: none"> <li>Best Practices guidelines offered during implementation and knowledge base offered</li> <li>Project Management, Requirements Gathering, System Setup, Integration with Existing EMR/EHR, Testing, Training, Go-Live Support</li> <li>Training: In-person instructor-led, Live webinar, Recorded webinar, Online training</li> <li>24 – 7 support using employed staff</li> <li>3 releases per year</li> </ul>	<ul style="list-style-type: none"> <li>Pre-authorization checking</li> <li>Centralized specialty routing facilitated</li> <li>Decline/Redirect enabled</li> <li>Billing coding</li> <li>Problem/Response template customization by Specialty</li> <li>Appointment linkage for in-person visits</li> <li>Patient communications w/PCP approval</li> <li>Single sign-on</li> </ul>		<ul style="list-style-type: none"> <li>Any computer, mobile device, telephone supporting browser access.</li> <li>No specific bandwidth considerations</li> </ul>
REPORTING & ANALYTICS		NOTABLE OBSERVATIONS OR CLIENTS/TESTIMONIALS	
<ul style="list-style-type: none"> <li>Audit reporting</li> <li>Process measures</li> <li>Activity reporting by specialty</li> <li>Backlog reporting</li> <li>Financial reporting</li> <li>Ad hoc reporting</li> <li>Data exporting for 3d party analytics/reporting</li> </ul>			

# Stella Technology

COMPANY INFORMATION	PRODUCT & LICENSING MODEL	DATA INTEGRATION	
<ul style="list-style-type: none"> <li>Based – San Jose, CA</li> <li>Founded in 2012</li> <li>35 employees</li> <li>3 clients live on product</li> <li>Product online since 2011</li> </ul>	<ul style="list-style-type: none"> <li>SaaS - Cloud-based, vendor hosted with client hosted model available</li> <li>Subscription pricing model</li> </ul>	<ul style="list-style-type: none"> <li>Integration includes: demographics, medications, allergies, chronic conditions, labs, radiology results, other diagnostics. SSO for front-end integration with EMR/HIE systems. Designed for seamless integration with payer or provider’s existing ecosystem.</li> <li>Uses HL7 v2, CCD/CCDA, Direct and other proprietary/batch formats</li> <li>Reported Mirth, Siemens, NextGen, IDX specifically; with full integration with a community, regional HIE is under implementation</li> </ul>	
PRODUCT NAME	CORE FEATURES		SECURITY & PRIVACY
<ul style="list-style-type: none"> <li>Caredination</li> </ul>	<ul style="list-style-type: none"> <li>Supports universal patient ID (searchable) with EHR integration</li> <li>Payer data transmission enabled</li> <li>Message customization by specialty</li> <li>Message urgency flagging</li> <li>Provider Treatment History information enabled</li> <li>Rules Engine for consult distribution</li> <li>Specialty Provider search and status changes (filter by payer accepted, geographic location, etc.)</li> <li>Guidelines embedding and eConsult documentation requirements</li> </ul>		<ul style="list-style-type: none"> <li>User authentication</li> <li>Secure messaging</li> <li>Data encryption</li> </ul>
SERVICE & SUPPORT	<ul style="list-style-type: none"> <li>Pre-authorization checking</li> <li>Centralized specialty routing facilitated</li> <li>Decline/Redirect enabled</li> <li>Roadmap - Billing coding</li> <li>Problem/Response template customization by Specialty</li> <li>Documentation, e.g. care plans (via templates)</li> <li>Care and task management features</li> <li>Appointment linkage for in-person visits</li> <li>Bi-Directional Patient communications w/PCP approval</li> <li>Single sign-on</li> </ul>		HARDWARE / SOFTWARE REQUIREMENTS
<ul style="list-style-type: none"> <li>Best Practices guidelines offered during implementation and knowledge base offered</li> <li>Project Management, Requirements Gathering, System Setup, Integration with Existing EMR/EHR, Testing, Training, Go-Live Support</li> <li>Training: In-person instructor-led, Live webinar, Recorded webinar, Online training</li> <li>24 – 7 support using employed staff</li> <li>Updates performed at client request</li> </ul>			<ul style="list-style-type: none"> <li>Any computer, mobile device, telephone supporting browser access</li> <li>No specific bandwidth considerations</li> <li>Client hosted model has server requirements</li> </ul>
REPORTING & ANALYTICS		NOTABLE OBSERVATIONS OR CLIENTS/TESTIMONIALS	
<ul style="list-style-type: none"> <li>Audit reporting</li> <li>Process measures</li> <li>Activity reporting by specialty</li> </ul>		<ul style="list-style-type: none"> <li>Backlog reporting</li> <li>Roadmap - Financial reporting</li> <li>Ad hoc reporting</li> <li>Data exporting for 3d party analytics/reporting</li> </ul>	



## About the Author

BluePath Health is a California-based consulting firm that partners with government agencies, public health organizations, health information technology companies, providers, and payers to develop policies and strategies that improve the delivery of patient care and build community health.

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