AMENDED IN COMMITTEE 03/09/16 ORDINANCE NO. **41-16**

FILE NO. 160043

INo Competitive Solicitation Process - Selection of Preferred Contractor - Regents of the University of California - Modern Electronic Health Record System] Ordinance providing that the competitive solicitation process requirement in Administrative Code, Section 21.1, shall not apply to the Department of Public Health's (DPH) contract for a modern, secure, and fully integrated electronic health record (EHR) system for the San Francisco Health Network to replace DPH's current system; ratifying the selection of the Regents of the University of California (UC), by and through the University of California San Francisco, as the preferred contractor; and authorizing DPH's Director of Health to enter into negotiations with UC to procure the new EHR system, or enter into negotiations with specified alternative vendors, as defined in this Ordinance, if negotiations with UC are unsuccessful. NOTE: Unchanged Code text and uncodified text are in plain Arial font. Additions to Codes are in single-underline italics Times New Roman font. Deletions to Codes are in *strikethrough italics Times New Roman font*. Board amendment additions are in double-underlined Arial font. Board amendment deletions are in strikethrough Arial font. Asterisks (* * * *) indicate the omission of unchanged Code subsections or parts of tables. Be it ordained by the People of the City and County of San Francisco: Section 1. Findings. (a) The San Francisco Health Network (SFHN) of the Department of Public Health (DPH or Department) provides direct health services to thousands of insured and uninsured residents of the San Francisco bay area, including those most socially and medically vulnerable. The SFHN includes primary care, regional emergency and trauma treatment. medical and surgical specialties, diagnostic testing, skilled nursing and rehabilitation, dental

care, comprehensive behavioral health and substance abuse treatment services, and jail

health services. This network of health care is an essential component of the San Francisco safety net.

(b) The growing complexity of managing information, documentation, and communication to meet the triple aim of health care reform – better care for individuals, better health for the population, and lower health care costs – requires adequate tools for all healthcare staff who play a role in providing safe, effective, and lower cost care.

(c) The SFHN needs a modern and fully-integrated electronic health record (EHR) system to improve patient safety and care coordination to better protect and promote the health of all San Franciscans, fulfill the federal requirements of EHR "meaningful use," and help achieve the aims of health care reform. This EHR system would replace an outdated patchwork of multiple vendor-supported and internally created EHR systems, which developed piecemeal over several decades. This patchwork includes an outmoded clinical medical record system that does not fully comply with federal care delivery requirements and is ineligible for federal Eligible Professional and Hospital incentive payments.

(d) DPH must replace its aging EHR system, which houses all patient records, including charting, test results, medication administration, and demographics, records of hospital procurement processing, and all acute and long-term care and pharmacy billing for SFHN patients. The current EHR system was implemented in 1996 and will be phased out and no longer supported by Cerner Corporation (Cerner) within the next few years. To make a safe and successful transition from this system, as well as several other aging and disparate EHR systems, to a modern, fully-integrated EHR system, the Department plans to extend its current EHR system contract with Cerner, which ends on June 30, 2017, until at least June 30, 2019.

(e) To encourage health care providers to upgrade their EHR systems, Congress mandated that Medicare eligible professionals, eligible hospitals, and critical access hospitals

(CAH) (collectively, Providers) that are not "meaningful users" of Certified EHR Technology under the Medicare EHR Incentive Program receive financial penalties. To participate in the Medicare EHR Incentive Program, and avoid penalties, Providers must demonstrate "meaningful use" in either the Medicare EHR Incentive Program or the Medicaid EHR Incentive Program.

(f) Based on analyses by the Chief Financial Officer of the Priscilla Chan and Mark Zuckerberg San Francisco General Hospital and Trauma Center (ZSFGH) and by KPMG, a consulting and audit firm, the SFHN estimates that its Medicare payment reductions related to inability to meet "meaningful use" requirements will be approximately \$876,000 annually starting in 2017, assuming that Stage 3 meaningful use penalties, as categorized under federal law, are enforced. The estimated reduction may be mitigated if the U.S. Department of Health and Human Services (HHS) grants the City a hardship waiver.

(g) In 2012, the Department embarked on an extensive research process to determine the best option for a modern, secure, and fully-integrated EHR system. The Department contracted with Sierra Systems (Sierra) to assess the Department's information technology (IT) system and develop a plan for expanding the role of technology in the Department's delivery of health care. Sierra made numerous recommendations, including: "Integration of Applications and Data to make the right data available to the right people at the right time. Integration would be easier if a single vendor software package could address all of the DPH information needs."

(h) In 2013, with each SFHN unit using a different electronic records system, the strain of coordinating among acute care, specifically among the Emergency Department, medical surgical care, intensive care, and the perioperative areas became more apparent. While the electronic records systems within each individual unit met operational needs, there was only limited ability to coordinate care as patients transitioned to various units within the SFHN.

(i) As a result, through its affiliation with the University of California San Francisco (UCSF), the Department contracted with Kurt Salmon and Associates (KSA), to further assess the Department's needs and goals in relation to the EHR vendor marketplace. KSA worked with DPH to develop a matrix of priorities, guiding principles, and criteria to help the Department identify potential single-vendor solutions for an integrated EHR system.

(j) Two of the primary vendors considered by KSA in 2013, were Epic Systems Corporation (Epic) and the Department's then electronic record system vendor, Siemens Healthcare Systems (Siemens). However, Cerner acquired Siemens in January of 2015, and has confirmed it will not be enhancing or updating DPH's current electronic records system, the Siemens product, but could provide a migration to Cerner's integrated EHR system solution, called Cerner Millennium®. Cerner's decision forced DPH to accelerate its plans to implement a modern EHR system to replace the incumbent, aging Siemens system.

(k) Cerner and Epic are the largest vendors providing a single integrated EHR system with the breadth that could likely meet the needs of the entire SFHN. Both vendors are experienced in developing systems for acute, ambulatory, and long term care, skilled nursing, inpatient psychiatric, perioperative, Emergency Department, ICU, inpatient pharmacy, revenue cycle management, and the necessary analytics to improve care and refine operations.

(I) According to HHS' statistics, and other studies, Epic and Cerner are the market leaders for EHR systems in ambulatory care and hospital settings. While the HHS statistics show that Epic and Cerner are the volume leaders for Providers and hospitals, respectively, reports by Gartner Inc., an international health care technology research and consulting firm, put Epic and Cerner at the top of the EHR industry based on multiple industry criteria, which commonly include functional depth, organizational alignment, ability to execute, and technical integration.

(m) The healthcare IT research firm, KLAS, confirms that Epic and Cerner are at, or near the top of, multiple EHR categories, such as Surgery Management and Application Hosting, with one or the other ranking first or second in all ambulatory and acute care categories. See http://thehealthcareblog.com/blog/2015/02/02/klas-announces-2014-best-in-klas-winners.

(n) Beginning in early 2015, DPH IT staff met with both Cerner and Epic to obtain information on the specifications that each of their respective EHR systems could deliver, the types of prerequisites that each would require from DPH, the ability of their systems to interface with some of the current products that their systems cannot replace, what implementation of their systems would look like, and the estimated costs associated with each.

(o) Between June and September 2015, DPH received several demonstrations from both Epic and Cerner about how their respective various EHR system modules functioned with respect to several key SFHN health care delivery services. These demonstrations served multiple purposes. They:

Provided initial exposure and engagement of vendor offerings to targeted stakeholders, particularly for modules with a perceived functional gap between Cerner and Epic;

(2) Solicited feedback from stakeholders, documenting strong objections to any particular module;

(3) Developed a preliminary list of functional areas that may require a third party or supplemental solution not offered by Cerner or Epic.

(p) During the course of these meetings and presentations, DPH concluded, that the breadth of products and functionality offered by Cerner and Epic's respective EHR systems are comparable. DPH also noted that a key consideration is the use of the Epic system by UCSF. Since the SFHN and UCSF need to continually share information and ZSFGH uses UCSF physicians to provide medical services through its Affiliation Agreement with UCSF, the familiarity and satisfaction of UCSF with Epic's EHR system, became an important factor. The Department recognized that it would receive substantially greater support from its provider community if it selected Epic, because physician adoption and acceptance of an EHR system is critical to the success of any EHR implementation.

(q) A report for the Department prepared by KSA in 2013, introduced the option of leveraging the Department's longstanding partnership with UCSF to link into the UCSF Epic EHR system, which allows this type of "shared use" via a process called Community Connect. Epic requires Community Connect hub organizations, like UCSF, to meet a rigorous set of accreditation criteria to ensure the product is kept updated and properly utilized and to adopt technology using EMR option Modelsm (EMRAM, http://www.himssanalytics.org/stage7). Depending on the pricing and subsidy decisions at the host organization, a Community Connect satellite site can benefit from a shared record and the technical resources of the host organization, often at a lower cost, and with a faster implementation timeline than developing a freestanding integrated EHR system directly from the vendor.

(r) Since 1864, ZSFGH and the UCSF School of Medicine have closely collaborated to provide health care services for the people of San Francisco. ZSFGH is one of UCSF's primary teaching hospitals, where medical residents train under UCSF faculty and City staff. Today, more than 2,000 UCSF physicians and staff from all four UCSF professional schools work side-by-side with 3,500 DPH employees, at both the hospital and the specialty and primary care clinics located on the ZSFGH campus.

(s) Beginning in August 2014, DPH IT staff met several times with UCSF staff, and more recently with Epic representatives, to better understand Epic's Community Connect accreditation process and estimated timeline, and how the shared use of UCSF's Epic EHR

system would help the Department achieve "meaningful use" under federal law while maintaining the security and privacy of SFHN's patients' confidential information. These meetings confirmed three key justifications for DPH's partnering with UCSF:

(1) The ability of UCSF to host the substantial infrastructure and hardware necessary to run their Epic EHR system sized to meet DPH's needs;

(2) The option to expand UCSF's existing EHR design, to the extent that it aligns with DPH's needs. This design has been systematically configured and refined over several years by UCSF and Epic analysts to meet the requirements of clinical and non-clinical users who work at UCSF and ZSFGH. Starting from this design will be familiar to a majority of DPH providers and is the optimal baseline for user adoption, change management, and implementation timeline; and

(3) UCSF physicians and residents have already received considerable training on and have extensive experience with the Epic EHR system, which should significantly reduce the training effort required to learn a DPH Epic system. An additional benefit of this pre-existing familiarity with the Epic system is to enable providers to focus on optimizing the care they provide to patients, contributing to improved patient satisfaction, safety, and continuity of care.

(t) In March 2015, UCSF, through a contract with the Department, analyzed DPH's current EHR system and information technology structure to determine the resources that would be required to extend and further customize UCSF's current Epic EHR system to DPH's entire SFHN via Epic's Community Connect structure. In June 2015, UCSF presented the results of its analysis to DPH, which revealed the following advantages of sharing UCSF's Epic EHR system:

(1) Leveraging UCSF's Epic EHR content and system design;

(2) Shared physician and residents/trainees;

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(3) Consistency of a single EHR system with many shared design elements for providers, supporting quality and safety;

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(4) Safer coordination of patient care at both UCSF and SFHN facilities;

(5) Facilitation of research via a shared patient database; and

(6) Experience and lessons learned from UCSF's Epic implementation.UCSF's report also included cost models for extending Epic to DPH and the proposed scope and timeline.

(u) On January 19, 2016, the San Francisco Health Commission, in Resolution No. 16-3, supported the Director of Health's (Director) decision to seek authority from the Board of Supervisors for the actions contemplated in this ordinance. A copy of this Resolution is on file with the Clerk of the Board of Supervisors in File No. 160043.

Section 2. Rationale for Not Requiring Competitive Solicitation.

(a) Section 21.1 of the Administrative Code requires departments to have a formal competitive solicitation process to procure commodities or services. There are several reasons to not require competitive solicitation in this instance, and, in accordance with the desire of DPH, authorize DPH to enter into exclusive negotiations with the Regents of the University of California (UC) for an agreement for shared use of its preconfigured and fully integrated Epic EHR system as described in Sections 1 and 2.

(b) As outlined in Section 1, there are only two EHR systems, Epic and Cerner, that can provide DPH a single vendor EHR system solution with the breadth of modules needed to provide effective records and information management for the many ways that DPH delivers health care. The current industry standard for the implementation of either system is approximately two years from the date a contract is finalized.

(c) After extensively researching various options over the last three years, the Department has concluded that contracting with UCSF to implement Epic as a Community Connect Partner is the Department's most viable option for several key reasons: clinical coordination/patient safety, clinical implementation support, population health research, and training and implementation costs.

(d) As described in Section 1, DPH has maintained a partnership with UC, through and by UCSF, for over 150 years. ZSFGH serves as one of UCSF School of Medicine's flagship teaching hospitals, and UCSF Medical Center has long served as the primary source of tertiary and quaternary care for SFHN patients. More recently, UCSF has been developing a Bay Area Accountable Care Organization that SFHN is interested in joining. UCSF chose Epic as its EHR system in 2012, and has since gained experience implementing the system not only across its three major sites (Parnassus, Mt. Zion, Mission Bay), but also at Children's Hospital Oakland and UCSF Benioff Children's Physician Group. UCSF also plans to implement the system in the near future at John Muir Medical Center and for the SFGH Clinical Practice Group.

(e) UCSF Medical Center (UCMC) is the primary referral center for tertiary and quaternary care for SFHN patients, ranging from diagnostic tests that are not available on the ZSFGH campus, such as nuclear medicine, to complex longitudinal care such as organ transplantation. The Department's shared use of UCSF's Epic site license would enable the SFHN and UCSF to seamlessly, and securely, share data on these mutual patients requiring complex care. Tangible benefits to DPH and SFHN from shared use include decreased costs from avoidance of duplicative testing, as well as improved patient safety from a common medication and allergy list. In addition, clinician (e.g., MD, RN) familiarity with an organization's EHR system is essential to ensure patient safety when entering orders and fully accessing critical health care information. In a given year, more than 85% of SFHN patients

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receive services at ZSFGH. Half of the ZSFGH attending physicians and all of the postmedical graduate trainees also provide care at UCMC, where they are intimately familiar with UCSF's Epic EHR system, and that familiarity reduces the risk of mistakes being made when entering information into, and accessing information from, the EHR system.

(f) Implementation and optimization of the SFHN's existing EHR systems has been hampered by a lack of clinical (RN and MD) resources to adapt and tailor clinical content and workflows, which is an extremely time-intensive process. UCSF spent thousands of hours creating and refining clinical templates that the Department anticipates can be used "out of the box" as a Community Connect satellite site. Implementing a COTS (commercial off-the-shelf) system with a proven and familiar design reduces the risk of missing project deadlines because of the extensive configuration of a new and unfamiliar alternative system. Ultimately, any project delays could result in a loss to the Department of federal incentive payments, and could adversely affect patient care coordination with UCSF.

(g) DPH and ZSFGH have a longstanding commitment to supporting research and evaluation focused on vulnerable populations. UCSF shares this commitment, and is a valued partner in these efforts. In recent years, the research has expanded to quality improvement focused on patients and clients. Now, with the advent of Accountable Care Organizations, and Department's Population Health Division's increased interest in a more comprehensive understanding of population health in San Francisco, shared data for evaluation and planning is more important than ever. Inclusion of the SFHN in UCSF's Epic EHR system would facilitate a deeper and fuller understanding of the health status of the City's population.

(h) The costs for training, and therefore implementation, will be significantly reduced by the Department using UCSF's existing Epic EHR system. Of the more than 1,200 physicians who work in the SFHN, approximately 900 are UCSF School of Medicine faculty based at ZSFGH. Many of these faculty, along with all 900 UCSF post medical graduate trainees, who constitute a large part of the workforce at ZSFGH, are familiar and facile with using the Epic system based on their clinical work at UCMC. Training in the Epic system is provided and supported by UCSF to all new incoming post medical graduate clinical trainees, all of whom work at both UCMC and ZSFGH. If SFHN implements UCSF's version of the Epic system, the Department would be able to leverage UCSF's training for this substantial and critical part of its workforce. In addition, UCSF serves as a major pipeline to fill SFHN positions – not only physicians, but nurses, pharmacists, and other health professionals.

Section 3. Competitive Solicitation Process Not Required.

(a) The competitive solicitation process requirement in Administrative Code Section
21.1 shall not apply to the Department for the specific purpose, as explained in Sections 1 and
2 of this ordinance, of procuring a modern, secure, uniform, and fully integrated EHR system
to replace the Department's current patchwork EHR system.

(b) This ordinance shall apply retroactively to all actions taken by City officials or City agencies or entities in connection with the Department's selection of the EHR system and vendor.

(c) The Board of Supervisors hereby ratifies and confirms all actions taken by City officials or City agencies or entities in selecting UC, through and by UCSF, as the City's preferred contractor.

Section 4. Authority to Negotiate an Integrated Electronic Health Record System with the Regents of the University of California.

(a) The Board of Supervisors hereby authorizes the Director of Health to enter into negotiations exclusively with UC, through and by UCSF, for a contract to allow the

Department's shared use of UCSF's electronic health record system, under UCSF's accreditation as an Epic Community Connect Partner. If, within six months of negotiation with UC, the Director is unable to obtain sufficient assurances that UC will be able to substantially meet the criteria listed in subsection (b) below, to reach a fair and reasonable agreement, the Director may also <u>commence a competitive solicitation process to procure an integrated EHR</u> system for the Department. If the Director shall commence a competitive solicitation process to procure an integrated EHR system for the Director shall commence a competitive solicitation process to procure an integrated EHR system for the Director shall commence a competitive solicitation process to procure an integrated EHR system for the Department. If the Director shall commence a competitive solicitation process to procure an integrated EHR system for the Department. The Director shall commence a competitive solicitation process to procure an integrated EHR system for the Department. The Director must obtain final approval from the Board of Supervisors of the agreement to procure an integrated EHR system for the Department.

(b) The final agreement for an integrated EHR system for DPH shall, at a minimum, substantially address the following criteria:

(1) Clearly calculated total cost of ownership over a 10-year period.

(2) Comprehensiveness of the EHR system to meet the breadth of care delivery within DPH.

(3) The EHR system will be fully hosted and supported "24/7" by the EHR partner.

(4) The EHR system will be maintained and updated to stay current with industry standards, compliant with Centers for Medicare and Medicaid Services (CMS) regulations pertaining to "meaningful use" current and future stages, and compliant with all state and federal regulations to protect patient privacy rights.

(5) DPH and the EHR partner will reach agreement on governance that would allow DPH the autonomy and accountability needed to be a conscientious steward of City resources.

(6) The EHR partner will agree with IT and Informatics on service levels for hosted solutions and technical support service levels.

(7) The EHR system will have sufficient interoperability and integration with other health care delivery organizations to effectively treat SFHN patients and clients.

(8) The EHR system will have a proven record of neutral or increase in revenue, including three clear examples of integrated delivery network (IDN) clients meeting this criterion within the past two years.

(9) The EHR system will have strong analytical capabilities to mitigate risks associated with readmissions and other CMS metrics impacting reimbursement, including three clear examples from academic teaching hospitals similar in size to ZSFGH.

(10) The EHR system will use population health analytics to support the realtime clinical decision making needs of a multi-faceted public health delivery system for optimal transitions of care, including three clear examples of IDN clients meeting this criteria. These analytical capabilities should also support DPH's mission to support ongoing research that improves outcomes.

(11) The EHR system will have proven solutions for public health organizations with an acute care Level 1 trauma center exceeding 200 beds, and for associated larger clinics (50+ providers), including three clear examples of IDN clients meeting this criteria.

(12) The EHR system will have a robust single patient portal that allows patients to engage in a meaningful way with all of their care providers.

(13) The EHR partner will be able to meet all terms and conditions of the City's contract requirements and requirements imposed by DPH on the scope of work and product solution.

Section 5. Severability.

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The provisions of this ordinance are severable. If any provision of this ordinance or the application thereof to any person or circumstance is held invalid, that invalidity shall not affect other provisions or applications of the ordinance which can be given effect without the invalid portion or application.

Section 6. Effective Date.

This ordinance shall become effective 30 days after enactment. Enactment occurs when the Mayor signs the ordinance, the Mayor returns the ordinance unsigned or does not sign the ordinance within ten days of receiving it, or the Board of Supervisors overrides the Mayor's veto of the ordinance.

APPROVED AS TO FORM: DENNIS J. HERRERA, City Attorney

By:

ARNULFO MEDINA Deputy City Attorney

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City and County of San Francisco Tails

City Hall 1 Dr. Carlton B. Goodlett Place San Francisco, CA 94102-4689

Ordinance

File Number: 160043

Date Passed: March 22, 2016

Ordinance providing that the competitive solicitation process requirement in Administrative Code, Section 21.1, shall not apply to the Department of Public Health's (DPH) contract for a modern, secure, and fully integrated electronic health record (EHR) system for the San Francisco Health Network to replace DPH's current system; ratifying the selection of the Regents of the University of California (UC), by and through the University of California San Francisco, as the preferred contractor.

March 09, 2016 Budget and Finance Sub-Committee - AMENDED, AN AMENDMENT OF THE WHOLE BEARING NEW TITLE

March 09, 2016 Budget and Finance Sub-Committee - RECOMMENDED AS AMENDED

March 15, 2016 Board of Supervisors - PASSED ON FIRST READING

Ayes: 9 - Avalos, Breed, Campos, Farrell, Mar, Peskin, Tang, Wiener and Yee Noes: 2 - Cohen and Kim

March 22, 2016 Board of Supervisors - FINALLY PASSED

Ayes: 8 - Avalos, Breed, Campos, Mar, Peskin, Tang, Wiener and Yee Noes: 2 - Cohen and Kim Excused: 1 - Farrell

File No. 160043

I hereby certify that the foregoing Ordinance was FINALLY PASSED on 3/22/2016 by the Board of Supervisors of the City and County of San Francisco.

Angela Calvillo Clerk of the Board

3/30/2016

Date Approved