HQCA
Health Quality Council of Alberta

A CASE STUDY EVALUATION

Crowfoot Village Family Practice and the Taber Clinic

October 2019

SUPPLEMENT

METHODOLOGY

The Health Quality Council of Alberta is a provincial agency that pursues opportunities to improve patient safety and health service quality for Albertans. It gathers and analyzes information, monitors the healthcare system, and collaborates with Alberta Health, Alberta Health Services, health professions, academia, and other stakeholders to drive actionable improvements.

Our responsibilities are set forth in the *Health Quality Council of Alberta Act.*

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METHODOLOGY

The goal of this project was to provide a comprehensive picture of two capitation based Alternative Relationship Plan (ARP) practice models implemented at Crowfoot Village Family Practice (CVFP) and Taber Clinic (TC) and to assess their impact on various outcomes. This project was informed by the illustrative case study evaluation approach. The case study approach is a method that generates comprehensive knowledge about an instance, such as a program, situation, or site, through the use of "extensive description and analysis of that instance taken as a whole and in its context" (1). An illustrative case study evaluation design is used when little is known about how contextual factors influence an instance and interact together to produce noticeable effects. This methodological approach was adopted because the project sought to explore interrelationships between a capitation based ARP, the practice model, experiences, and contextual features (such as geography and Primary Care Network (PCN) governance structures) and the impact of the funding arrangement on specific outcomes, such as the costs of care to the health system and healthcare utilization patterns.

Consistent with an illustrative case study evaluation approach, different forms of data collection, data sources, and analysis were used to gather information about CVFP and TC. Site visits, interviews, focus groups, surveys, and the analysis of administrative data and other documents occurred to identify trends, patterns, themes, and to develop a full understanding of what is happening at these two Alberta clinics. Triangulation, or the comparison of information across data sources, allows the HQCA to tell a story about CVFP and TC that is rich in details and credible.

Data collection began in the fall of 2018 and continued until spring 2019. In fall 2018, the project lead and members of the project team visited each site to socialize the project to clinic leaders. Shortly after, clinic leaders were interviewed by two members of the project team to develop a preliminary understanding of the practice model and to make plans for the collection of data from providers, patients, and the EMR. These clinic leaders were also interviewed on an ongoing basis throughout the duration of the study to discuss, from their experience, how the ARP informs their practice model, clinic practices, and business operations. Interviews were digitally recorded and transcribed verbatim, with quotes included, as needed, throughout the report. Clinic leaders were also asked to provide copies of pre-existing and current funding agreements and annual reports. This information was used to describe regulatory features of the ARP and the practice model in the report, and, wherever possible, to plan a strategy for the analysis of the quantitative data.

Early conversations with clinic leaders and descriptions of their practice model were used to identify which participant groups needed to be interviewed at each site to explore further interconnections between the ARP and the delivery of primary care services. The following participant groups were identified: physicians, nursing professionals, medical office assistants, and other types of health professionals that work alongside clinic staff but are associated with external agencies (i.e., Alberta Health Services (AHS), PCN).

To gather information from these groups, in February 2019, a site visit occurred over two days at each clinic by two members of the project team, with expertise in interviewing, to conduct semi-structured interviews and focus groups with providers. In preparation for this visit, clinic leaders advertised the project to staff and asked for volunteers to participate. Physicians were interviewed one-on-one for approximately 30 to 45 minutes, with data collection occurring from other provider participant groups

during one-on-one interviews or focus groups. Two participants were interviewed over the telephone in March 2019 due to scheduling conflicts during the site visit.

Table 1 reports the number of participants interviewed for each provider participant group at both sites. The nursing professional group includes a mix of Nurse Practitioners, Registered Nurses, and Licensed Practical Nurses because different types of nurses work at each site. Participants in the 'external provider' group are a mix of professional types that work for agencies external to the clinic (i.e., AHS, PCN). This group includes registered nurses with specialized training, pharmacists, and improvement professionals. Interviews with these various participant groups helped to develop a comprehensive and deep understanding from different points of view of the practice model and to explore interrelationships between the practice model, ARP, and relevant contextual features. Questions in the interviews and focus groups were designed to gather information about provider experiences delivering primary care services under an ARP to understand the perceived value of an ARP, how the ARP impacts the practice model, including the roles and responsibilities of healthcare providers, what is working well/not well with the ARP, and facilitators and barriers to the delivery of primary care services under an ARP (see Appendix A for copies of the provider interview guides).

Table 1: Number of participants per participant group and form of data collection

Participant Group	CVFP	TC	Total	Form of data collection
Clinic leaders	1	1	2	Interview
Physicians	5	5	10	Interview
Nursing professionals	8	7	15	Interview or focus group
Medical office assistants	8	4	12	Focus group
External providers	6	5	11	Interview or focus group

Patient experiences with the delivery of primary services under an ARP were assessed using a survey and semi-structured telephone interviews or focus groups. The HQCA's Primary Care Patient Experience survey, which is adapted from the Consumer Assessment of Healthcare Providers and Services (CAHPS®) Clinician & Group Survey 2.0, is a tool that can be used to evaluate the performance of clinics and providers. This survey assesses four dimensions of care that can impact a patient's experience with their physician and the clinic (e.g., access, communication, healthcare team, and treatment plans & care priorities), and provides information on patient-reported outcome measures. Summary scores of performance are available at the clinic level across each dimension of care. The HQCA regularly conducts this survey with volunteering clinics. As such, the use of this survey provided the opportunity to compare findings at CVFP and TC with the aggregate of other physicians in Alberta who have participated in the past 12 months. Survey data was collected from patients aged 16 or older at each clinic during a three-month period using a census approach that asked every patient with a clinic visit to provide their email address. This information was entered by staff into the EMR along with the name of the physician being seen on that date. At the end of each day patient email addresses were extracted and securely transferred to the HQCA and uploaded into a REDCap survey software database, so that the patients could be automatically sent an invitation to complete the survey.

Table 2 reports the number of eligible respondents during the data collection period, number of respondents to the survey, and response rate for each clinic.

Table 2: Number of respondents participating in the survey and response rate

	CVFP	TC
Number of eligible respondents during the data collection period	4017	1693
Number of respondents to the survey	1209	618
Response rate (%)	30.1	36.5

Telephone interviews or focus groups were conducted with patients to more deeply explore patient experiences with primary care under an ARP. The plan was to recruit approximately five to seven patients from each clinic from two groups of patients that were identified using the technique of purposive sampling (2). The first group was defined as patients aged 18+ new to the clinic in the last three years with a minimum of five medical encounters. The second group was defined as patients aged 18+ with a chronic illness and lengthy history at the clinic. The intent of the interviews was to explore with each group how patient experiences with primary care have changed, if at all, since becoming a patient of a clinic with an ARP (see Appendix B for copies of the patient interview guides). A 'new patient' group was purposefully identified recognizing that these patients might have fresh memories and compelling insights given their recent transition from a fee-for-service (FFS) to a capitation-based practice model.

As part of recruitment for this participant group, each site used their EMR to identify patients with these specific eligibility requirements for both groups. Then clinic staff sought permission from individual patients for the HQCA to contact them to discuss and schedule their participation in the study. Unfortunately, staff at TC did not have resources to support the recruitment of patient participants at the time the HQCA was completing this project milestone. TC provided the HQCA with the name of three patients from group one and interviews with only two patients could be arranged. The data collected from these individuals is not included in this report because the sample size is too small to identify patterns and themes from the point of view of patients at TC. CVFP had more success with the recruitment of participants, but still struggled to meet our target sample sizes for both groups. In total, at CVFP, three patients from group one, and five patients from group two, participated in the study.

The qualitative arm of this study was reviewed using the A Project Ethics Community Consensus Initiative (ARECCI) tool, and by a second-opinion reviewer through ARECCI. As part of the informed consent process, verbal consent to participate in this study was obtained from all participants completing an interview/focus group after the review of an informed consent form that reviewed the purpose of the project: risks and benefits to their participation; steps that would be taken to protect their confidentiality and anonymity; and, how members of the project team would use the information they provided. Interviews with clinic leaders were recorded and transcribed verbatim. Hand-written notes were taken during interview with providers and patients, with interview summaries prepared by the interviewer after each interview or focus group. Transcripts and interview summaries were used to facilitate the analysis of data. Data analysis of each qualitative data source involved two members of the project team working independently to identify patterns and themes, and then meeting to discuss areas of convergence and divergence within and across participant groups. Analysis of the data involved looking for patterns, themes, and relationships within and across participant groups, and the

identification of what was similar across clinics or unique to one clinic. Analysis involved looking for instances of how specific structural elements of the ARP (e.g., negation, the roster) impact clinic practices and for examples of interrelationships between the funding agreement and context (e.g., urban/rural, PCN) as this pertains to the implementation of the practice model and clinic practices. Analysis also sought to identify dominant themes with respect to the perceived significance or value of the ARP to the delivery of primary care services from the point of view of providers and patients.

Quotes that illustrate the experiences, perceptions, and points of view of participants are provided in the report, with identifying information removed. If a theme or pattern is found to exist across sites, then the data is presented as an aggregate finding that reflects the view of both sites. However, if a theme or pattern is specific to one site or a participant group, then the identity of the participant group is revealed. This approach to the presentation of data provides information as this relates to project objectives, but it also protects the identity of individual participants given the small sample sizes.

To assess the cost and quality of care provided by the two clinics under a capitation based ARP, a quantitative analysis of each clinic using existing administrative data was conducted. To enable this, panel rosters (i.e., a list of patients rostered to each clinic) were provided to the HQCA by Alberta Health. From this, each clinic's list of rostered patients was assembled for the 2007-08 to 2016-17 fiscal years (April 1 to March 31). For demographic purposes, each clinic's roster was considered to be the number of paneled patients at year-end. For example, the panel for 2016-17 is the number of rostered patients as of March 31, 2017. Utilization patterns and associated costs were measured for each of the above-mentioned fiscal years. Measures of utilization included number of visits to family doctors, specialists, and other providers, as well as emergency department visits and inpatient discharges. Costs of care across these settings were measured using fee-for service claims, capitation payment agreements, and other data provided by Alberta Health Services and other stakeholders. All utilization and cost measures were calculated on a per-patient basis.

To enable appropriate peer comparisons, CVFP results were compared with Alberta Metro (comprised of Calgary and Edmonton), and TC results were compared with Alberta Rural (other rural communities) (3). Raw and adjusted comparisons were performed. Factors included in adjusted analyses were age, sex, clinical risk group (CRG), material deprivation, and social deprivation. This allowed the HQCA to account for differences between urban and rural areas in Alberta, as well as a variety of factors which have been shown to be associated with health utilization patterns and outcomes.

Further details regarding the data sources used, calculations performed, how visits and costs were attributed to each clinic, and the comparative statistical analyses are provided in Appendices C to F.

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APPENDICES

APPENDIX I: PROVIDER PARTICIPANT INTERVIEW GUIDES

Interview Guide: Physicians

- Please describe your experience of providing primary care services under an ARP funding model.
- What opportunities, if any, does an ARP funding model present for physicians?
- What challenges exist for physicians providing primary care under an ARP?
- When you think about your panel, to what extent does the ARP enable you to provide comprehensive care?
- To what extent does negation influence your ability to provide primary care to your panel and operate the practice?
- How, if at all, would you change the ARP?
- What is the most valuable lesson you have learned about providing primary care under an ARP?
- Is there anything else we should know about providing primary care under an ARP?

Interview Guide: Nurses/Nurse Practitioner

- Please describe your experience of providing primary care services under an ARP funding model.
- To what extent do you feel as if you you/the nursing team is/are working within the full scope of nursing practice at CVFP/TC? How does the ARP support, if at all, your ability to work within the full scope of practice?
- What opportunities, if any, exist for you in relation to your scope of practice at CVFP/TC? To what extent do you think the ARP contributes this?
- With these opportunities in mind, how do you think the ARP effects the delivery of primary care services for patients?
- What challenges, if any, exist for you in relation to your work at CVFP/TC? In what ways do you think the ARR contributes to this?
- What are some of the most memorable changes you have experienced to the way you/your team has used their nursing skills over the years? What were some of the motivating factors behind making these changes?
- Please describe some of the projects that you are working on currently as a team to improve the delivery of primary care services for patients.
- How, if at all, have professional associations supported your nursing role at this clinic?
- Are they any other questions that you think we should have asked?

Interview Guide – Medical Office Assistants

- Please describe the types of roles of MOAs at CVFP/TC. How do these different roles help you manage patient care?
- What opportunities do you think the ARP presents to you in your work.

- What challenges does the ARP present for you in your work?
- Tell us about how informing patients about the ARP is part of your work.
- How has training or support from your manager/managers helped you to understand your role/work in relation to the ARP, a feature that is unique to this clinic?
- What is the most important thing you have learned about working under an ARP?
- Are they any other questions that you think we should have asked?

Interview Guide – Health Professionals from External Agencies

- Please describe your work assignment at this clinic. How does this work assignment compare to your experiences with other clinics?
- Is there anything at CVFP/TC that enables you to improve the delivery of patient care? How, if at all, does the ARP contribute to this?
- What opportunities, if any, exist for you in relation to your work at CVFP/TC? In what ways, if any, do you think the ARP contributes to this?
- What challenges, if any, exist for you in relation to your work at CVFP/TC? In what ways, if any, do you think the ARP contributes to this?
- Please describe some of the projects that you are working on currently on as an individual or as part of the wider CVFP/TC team to improve the delivery of primary care services for patients.
- What have been key learnings for you over the years about what it is like to work at a clinic that provides primary care under an ARP?
- Are they any other questions that you think we should have asked?

Interview Guide – Improvement Facilitators

- Please describe your work assignment at this clinic. How does this work assignment compare to your experiences with other clinics?
- What types of support/resources do you offer to this clinic?
- What types of quality improvement projects have you worked on with staff at this clinic. In what ways, if any, do you think the ARP contributes to these types of projects?
- What opportunities exist for you in relation to your work at CVFP/TC? In what ways, if any, do you think the ARP contributes to this?
- What challenges exist for you in relation to your work at CVFP/TC? In what ways, if any, do you think the ARR contributes to this?
- What have been key learnings for you over the years about what it is like to work at a clinic that provides primary care under an ARP?
- Are they any other questions that you think we should have asked?

APPENDIX II: PATIENT PARTICIPANT INTERVIEW GUIDE

- Tell me about how you became a patient at CVFP/TC.
- Tell me about some of the positive experiences you've had at this clinic.
- What are your feelings about the quality of care that you receive when you visit CVFP/TC? How do your feelings/experience compare to visits at other clinics?
- New patients only: What changes have you observed in how you see your family doctor since becoming a patient at CVFP/TC? What are your feelings about these changes?
- What are your feelings about getting an appointment at CVFP/TC when you need one?
- How well do you think that the staff at this clinic know your unique needs and concerns? Please provide me with an example to help us to understand this.
- How does the clinic help you to look after your health? What are some of the things that they do?
- Thinking back over your experience at CVFP/TC, what areas do you think need improvement?
- In Alberta, primary care is the first point of contact a person has with the health system—the point where people receive care for most of their everyday health needs. Primary care is typically provided by: family physicians, nurses, dietitians, mental health professionals, pharmacists, therapists, and others. With this definition in mind, in what ways does the care provided at CVFP/TC fulfill these expectations? In what ways does the care provided at CVFP/TC not meet your expectations?

APPENDIX III: DATA SOURCES FOR THE QUANTITATIVE ANALYSES

The following administrative data sets were used to complete the quantitative (impact) portion of the evaluation:

Data source	Description	Dates included
1. Clinic panel data – CVFP	Provided directly to the HQCA from Alberta Health. Contains the list of patients rostered to the Crowfoot Village Family Practice (CVFP)	April 2007 to March 2017 (real-time)
2. Clinic panel data - TC	Provided directly to the HQCA from Alberta Health. Provides the list of patients rostered to the Crowfoot Village Family Practice (CVFP)	April 2007 to March 2017 (real-time)
3. Population Registry	Contains demographic and geographic information for all Albertans covered under the Alberta Health Care Insurance Plan (AHCIP).	April 2007 to March 2017 (snapshot at fiscal year-end)
4. Postal Code Table	A comprehensive list of postal codes in Alberta. Contains elements such as municipality, local geographic area, Alberta Health Services zone, and rural-urban geographic areas	April 2007 to March 2017 (snapshot at fiscal year-end)
5. Clinical Risk Group (CRG)	Assigns a score from 1 (healthiest) to 9 (sickest) for each Albertan, based on the previous three years.	April 2007 to March 2017 (snapshot at fiscal year-end)
6. Material Deprivation Index	Assigns a score from 1 (least deprived) to 5 (most deprived) at the postal code level	2006 census data used for 2007/08 to 2010/11 fiscal years 2011 census data used for 2011/12 to 2016/17 fiscal years
7. Social Deprivation Index	Assigns a score from 1 (least deprived) to 5 (most deprived) at the postal code level	2006 census data used for 2007/08 to 2010/11 fiscal years 2011 census data used for 2011/12 to 2016/17 fiscal years
8. Practitioner Claims	Contains a comprehensive list of fee-for-service and shadow billed claims, as submitted to Alberta Health	April 2007 to March 2017 (real-time)

Data source	Description	Dates included
9. Ambulatory Care Classification System (ACCS)	Contains records pertaining to emergency department visits and day procedures	April 2007 to March 2010 (real-time)
10. National Ambulatory Care Reporting System (NACRS)	Contains records pertaining to emergency department visits and day procedures	April 2010 to March 2017 (real-time)
11. Discharge Abstract Database (DAD)	Contains inpatient discharge records for inpatient care, as well as free-standing rehabilitation and psychiatric hospitals	April 2007 to March 2017 (real-time)
12. Clinic Agreements and/or Ministerial Orders	These documents outline the terms and conditions in each clinic's agreement with Alberta Health. A list of "in-basket" services, and the age/sex-specific annual capitation rates are also provided.	April 2014 to present

APPENDIX IV: SUMMARY OF CALCULATIONS FOR THE QUANTITATIVE ANALYSES

Panel Size

From the lists of patients provided by Alberta Health, each clinic's panel of rostered patients was calculated. This is reported as the number of active panel patients at fiscal year-end (e.g., March 31, 2017 for 2016-17 fiscal year).

Demographic Information

Sex and age were obtained from the population registry data set. Clinical Risk Group (CRG), material deprivation, and social deprivation were compiled from HQCA administrative data holdings. Each of these data points were assigned at fiscal year-end for all patients in the Alberta Health Care Insurance Plan (AHCIP) registry.

Family Doctor Visits

Family doctor visits were tabulated using the practitioner claims database. All records with a provider code of "GP" and a delivery type code of "POFF", "AMBU", "IPSR", "LTC", or (blank) were considered in-scope. Records were limited to one provider per day, per patient, using the practitioner ID and date of service fields.

Specialist Visits

Specialist visits were tabulated using the practitioner claims database. All records with a provider code of "CARD", "CLIM"," CMSP", "CRCM", "CRSG", "CTSG", "DERM" ,"E/M", "GAST" , "GEMD", "GNMH", "GNSG", "HEM", "IDIS", "INMD", "MDGN", "MDON", "NEPH", "NEUR", "NPM", "NUSG", "OBGY", "OCMD", "OPHT", "ORTH", "OTOL", "PDGE", "PDNR", "PDSG", "PED", "PEDC", "PEDN", "PHMD", "PLAS", "POD", "PODS", "PSYC", "RHEU", "ROSP", "RSMD", "SPMH", "THOR", "UROL", "VSSG" were considered in-scope. Records were limited to one provider per day, per patient, using the practitioner ID and date of service fields.

Other Provider Visits

Other provider visits were tabulated using the practitioner claims database. All records not classified as family doctor or specialist visits (as above) were considered in-scope. Records were limited to one provider per day, per patient, using the practitioner ID and date of service fields.

Family Doctor fee-for-service payments

Family doctor fee-for-service payments were tabulated using the practitioner claims database. All records deemed a family doctor visit (as per the family doctor visits definition, above) were considered in-scope. Amounts paid were calculated using the "FRE_ACTUAL_PAID_AMT" field.

Specialist fee-for-service payments

Specialist doctor fee-for-service payments were tabulated using the practitioner claims database. All records deemed a specialist visit (as per the specialist visits definition, above) were considered in-scope. Amounts paid were calculated using the "FRE_ACTUAL_PAID_AMT" field.

Other Provider fee-for-service payments

Other provider fee-for-service payments were tabulated using the practitioner claims database. All records deemed as an "other provider" visit (as per the other provider visits definition, above) were considered in-scope. Amounts paid were calculated using the "FRE_ACTUAL_PAID_AMT" field.

Capitation payments

Annual per-patient capitation payment rates were obtained from the most recent Ministerial Order for the CVFP and TC. These are shown in the appendices of the main report. To ensure accurate payment amounts, each age/sex-specific rate was applied on a per-day rate, then calculated as an actual, yearly amount paid for each paneled patient. For example, at CVFP, the annual capitation rate for a 44 year-old female was $335.53. If this person was actively rostered at CVFP for 300 days in the 2016-17 fiscal year, then the capitation payment would be $275.61 [($335.53 ÷ 365) x 300].

Negation amounts

For each family doctor record in the practitioner claims database (see above), we determined whether the service provided was "in-basket" for each clinic, as per the most recent Ministerial Order. If the "FRE_ACTUAL_PAID_AMT" field was greater than 0, and the service provided was deemed "in-basket" for an actively rostered patient, then the amount paid was determined to be a negation one, as per the conditions in each clinic's Ministerial Order. Negation amounts were calculated per patient in each fiscal year. The amount negated for each patient was capped at the amount paid in capitation for that patient. As per the example above, a 44 year-old female may have incurred $850 in negation amounts in the 2016-17 fiscal year. As per the Ministerial Order, this amount was capped at $335.53 (in the case of the patient being rostered for the entire fiscal year).

Emergency Department Visits

Emergency department visits were tabulated using the Ambulatory Care Classification System (ACCS) or National Ambulatory Care Reporting System (NACRS) databases. All records with a Management Information System (MIS) code beginning with "71310" were considered to be in-scope. When a record did not have a valid Canadian Triage Acuity Score (CTAS), a score of 9 (unknown) was assigned.

Emergency Department Costs

Emergency department costs were assigned using 2017-18 data provided by Alberta Health Services (AHS). For the purposes of this report, each visit's cost was assigned according to CTAS score (CTAS 1=$901, CTAS 2=$578, CTAS 3=$410, CTAS 4=$243, CTAS 5=$199, CTAS 9=$201,). Please note that these costs may vary by hospital and do not include any physician fee payments.

Inpatient Discharges

Inpatient discharges were tabulated using the Discharge Abstract Database. Length of stay data was compiled using the "all_days" data field.

Inpatient Costs

Inpatient costs were calculated according to common cost estimates provided by AHS, the Institute for Health Economics (IHE), and the O'Brien Institute for Public Health (University of Calgary). Using 2013-14 data, each inpatient day was assigned the medical bed-day rate of $994 per day. Please note that this cost may vary across hospitals, and throughout a patient's course of care, with the first 1 to 2 days of a hospital stay being the most expensive. Like with the emergency department, this cost does not include any physician fee payments.

APPENDIX V: ATTRIBUTION OF VISITS AND COSTS TO EACH CLINIC

Panel data from both clinics was used to determine whether an Albertan was among the roster at either clinic at the time of incurring any health services. To assess this (in real time), the following fields from the respective data sources were used.

Measure	Data source(s)	Data field
Family doctor visits Specialist visits Other provider visits	Practitioner claims	SE_START_DATE
Negation amounts	Practitioner claims	SE_START_DATE
Emergency department visits Emergency department costs	ACCS, NACRS	VISITDATE, VISIT_DATE
Inpatient discharges Inpatient costs	DAD	DISDATE

If any date (from the "data field" column in the above table) in each of the respective data sets was between the panel start date and the panel end dates for each clinic, then the visit/service in question was attributed the CVFP or Taber Clinic, as appropriate. When the visit/service date fell outside of this range, the patient was deemed to be "non-paneled" and placed in the "rest of Alberta" group for further peer comparisons (please see Appendix VI).

APPENDIX VI: COMPARATIVE ANALYSES

Using data from the Postal Code table, utilization patterns and costs at the CVFP and TC were compared with their appropriate rural-urban continuum peer group comparator. For the CVFP, the peer-group comparator was “Alberta-Metro”, consisting of Calgary and Edmonton proper. For the TC, the peer-group comparator was “Alberta-Rural”, consisting of areas with populations less than 10,000 and up to 200 kilometres from a Metro or Urban Centre. Examples include towns, villages, hamlets, and agricultural areas across Alberta (3).

All utilization and cost metrics at each clinic were compared with the “rest of Alberta” as well as each clinic’s peer group comparator, as described above. Crude (raw) and adjusted analyses were performed. Factors included in the adjusted analyses were age, sex, clinical risk group (CRG), material deprivation, and social deprivation. Analyses were calculated for each fiscal year, from 2007-08 to 2016-17.

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