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*Experience Report*

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Torres ELO. Care Coordination Between Emergency and Primary Health Care for Patients with Chronic Diseases. Rev. Tec. Cient. CEJAM. 2026;5:e202650055. DOI: https://doi.org/10.59229/2764-9806.RTCC.e202650055.

## Editors



| Submitted | Accepted |
|---|---|
| 07-07-2026 | 08-08-2026 |

# Care Coordination Between Emergency and Primary Health Care for Patients with Chronic Diseases

## Coordenação do Cuidado entre Urgência e Atenção Primária para Pacientes com Doenças Crônicas

## Coordinación del Cuidado entre Urgencias y Atención Primaria para Pacientes con Enfermedades Crónicas

### Abstract

**Objective:** To describe the development of an organizational care coordination model for patients with decompensated chronic diseases treated in a public emergency care service, aiming to strengthen integration with Primary Health Care and continuity of care. **Method:** An experience report developed in accordance with the Standards for Quality Improvement Reporting Excellence (SQUIRE 2.0) guidelines in a public emergency care service within the Brazilian Unified Health System. The model was developed based on the analysis of clinical workflows, scientific evidence, and institutional experience, incorporating eligibility criteria, a structured discharge plan, communication between levels of care, longitudinal follow-up, and performance indicators. **Results:** The model incorporated care coordination into emergency care workflows by organizing the identification of eligible patients, structured discharge planning, integration with Primary Health Care, and continuity of care. It also established indicators to monitor care performance. **Conclusion:** The model strengthens integration between emergency services and Primary Health Care, expanding the role of emergency care in coordinating care for patients with chronic diseases and providing a potentially transferable organizational strategy for the Brazilian Unified Health System.

**Descriptors:** Care Coordination; Primary Health Care; Chronic Disease; Emergency Medical Services; Continuity of Patient Care.

### Resumo

**Objetivo:** Descrever o desenvolvimento de um modelo organizacional de coordenação do cuidado para pacientes com doenças crônicas descompensadas atendidos em um serviço público de urgência, visando fortalecer a integração com a Atenção Primária à Saúde e a continuidade assistencial. **Método:** Relato de experiência elaborado conforme a diretriz Standards for Quality Improvement Reporting Excellence (SQUIRE 2.0), desenvolvido em um pronto-socorro público do Sistema Único de Saúde. O modelo foi construído com base na análise dos processos assistenciais, na literatura científica e na experiência institucional, estruturando critérios de elegibilidade, plano de alta, comunicação entre os níveis assistenciais, monitoramento longitudinal e indicadores. **Resultados:** O modelo fortalece a integração entre urgência e Atenção Primária, ampliando o papel dos serviços de urgência na coordenação do cuidado de pessoas com doenças crônicas e oferecendo estratégia organizacional potencialmente reproduzível no Sistema Único de Saúde. **Conclusão:** O modelo fortalece a integração entre urgência e Atenção Primária, ampliando o papel dos serviços de urgência na coordenação do cuidado de pessoas com doenças crônicas e oferecendo estratégia organizacional potencialmente reproduzível no Sistema Único de Saúde.

**Descritores:** Coordenação da Assistência ao Paciente; Atenção Primária à Saúde; Doença Crônica; Serviços Médicos de Emergência; Continuidade da Assistência ao Paciente.

### Resumen

**Objetivos:** Describir el desarrollo de un modelo organizacional de coordinación del cuidado para pacientes con enfermedades crónicas descompensadas atendidos en un servicio público de urgencias y emergencias, con el fin de fortalecer la integración con la Atención Primaria de Salud y la continuidad asistencial. **Método:** Relato de experiencia elaborado conforme a la guía Standards for Quality Improvement Reporting Excellence (SQUIRE 2.0), desarrollado en un servicio público de urgencias y emergencias del Sistema Único de Salud de Brasil. El modelo se desarrolló a partir del análisis de los procesos asistenciales, la evidencia científica y la experiencia institucional, incorporando criterios de elegibilidad, plan estructurado de alta, comunicación entre los niveles asistenciales, seguimiento longitudinal e indicadores de desempeño. **Resultados:** El modelo incorporó la coordinación del cuidado al flujo asistencial del servicio de urgencias mediante la identificación de pacientes elegibles, el plan estructurado de alta, la integración con la Atención Primaria de Salud y el seguimiento de la continuidad asistencial. Además, estableció indicadores para el monitoreo del desempeño asistencial. **Conclusión:** El modelo fortalece la integración entre los servicios de urgencias y la Atención Primaria de Salud, ampliando el papel de los servicios de urgencias en la coordinación del cuidado de personas con enfermedades crónicas y ofreciendo una estrategia organizacional potencialmente transferible para el Sistema Único de Salud de Brasil.

**Descriptores:** Coordinación de la Atención al Paciente; Atención Primaria de Salud; Enfermedad Crónica; Servicios Médicos de Urgencia; Continuidad de la Atención al Paciente.

## INTRODUCTION

Chronic noncommunicable diseases (CNCDs) represent one of the major contemporary challenges for health systems due to their high prevalence, their impact on morbidity and mortality, and the need for longitudinal and coordinated follow-up within the Health Care Network (RAS)[1,2]. Population aging, multimorbidity, and the increasing demand for continuous care add to the complexity of care, requiring organizational models capable of integrating different points of care, improving clinical outcomes, and promoting greater efficiency in care[3,4]. In this context, care coordination is one of the pillars for organizing health systems geared toward the population's needs[5–7].

In the Unified Health System (SUS), the Health Care Network was designed to overcome the fragmentation of services through integration across different levels of care and shared responsibility for care[1,8]. In this model, Primary Health Care (PHC) plays a central role as the coordinator of care and is responsible for the longitudinal follow-up of people with chronic conditions[9–10]. However, challenges persist regarding integration among care sites, communication between services, and continuity of care, especially following visits to urgent and emergency care services[5-10].

Although traditionally focused on the clinical stabilization of acute episodes, urgent care services treat a large number of patients with decompensated chronic diseases, such as hypertension, diabetes mellitus, and other conditions requiring ongoing monitoring. After discharge, many return home without structured mechanisms for reintegration into primary care, leading to discontinuity of care, repeat visits, and potentially preventable hospitalizations[7,10].

In this context, care transitions have been recognized as an essential component of care coordination[2,11]. The transition between different levels of care represents a critical moment for continuity of care, and strategies such as structured discharge plans, standardized communication between services, and longitudinal follow-up demonstrate the potential to strengthen care integration and reduce avoidable readmissions[2,11-12].

The principles of the Triple Aim—later expanded by the Quadruple Aim—and of Value-Based Healthcare emphasize that value creation depends on the ability of systems to produce better clinical outcomes throughout the care journey of people with chronic conditions[3,4,13]. However, there remain few studies describing organizational models capable of using emergency department care as an opportunity to strengthen care coordination between the emergency department and primary care, with most initiatives remaining focused on resolving the acute episode[5–10].

Given this scenario, it is important to present experiences that expand the role of emergency services as strategic components of the Healthcare Network, strengthening the integration between emergency care and primary care and promoting continuity of care for people with chronic diseases.

## METHOD

### Study Type

This is an experience report, prepared in accordance with the EQUATOR Network's Standards for Quality Improvement Reporting Excellence (SQUIRE 2.0)[14] from the EQUATOR Network, which describes the development of an organizational model aimed at strengthening the coordination of care for patients with decompensated chronic diseases treated at a public emergency department, promoting their integration with primary health care.

### Study Setting

The study was conducted at a municipal public walk-in emergency department, part of the SUS Emergency Care Network, located in Barueri (SP) and managed by a Social Health Organization. The facility handles approximately 25,000 patient visits per month, including a high volume of patients with decompensated chronic diseases who require long-term follow-up by primary care.

### Target Population

The model was developed for patients with decompensated chronic diseases treated at the emergency unit, especially those with hypertension, diabetes mellitus, multimorbidity, recurrent visits, or a need for long-term follow-up. Its structure can be adapted for other clinical conditions that require integration across the different levels of the Health Care Network.

### Development of the organizational model

The model was developed based on an analysis of care processes, the scientific literature[1-13] and institutional experience, identifying gaps in continuity of care following discharge from the emergency department. It was structured into five organizational components: eligibility criteria; structured discharge plan; communication between levels of care; longitudinal monitoring; and process and outcome indicators.

### Institutional Flow

The care pathway begins with the identification of eligible patients during emergency department visits, followed by clinical stratification, development of a structured discharge plan, communication with primary care, and longitudinal monitoring using indicators, with the aim of strengthening integration among the different points in the Healthcare Network.

### Indicators

Process and outcome indicators were defined to monitor the implementation of the model and evaluate its contribution to care coordination, continuity of care, and integration between the emergency department and PHC. The indicators include the identification of eligible patients, the development of discharge plans, communication between levels of care, attendance at PHC, recurrence of visits, and potentially preventable hospitalizations.

### Ethical and Integrity Considerations

This study describes the development of an organizational model based on aggregated institutional data, without the use of individualized clinical data or the identification of patients and healthcare professionals. The manuscript preserves the confidentiality of care-related information and was prepared within the context of institutional management and quality improvement activities, in accordance with the ethical principles applicable to data protection and scientific integrity.

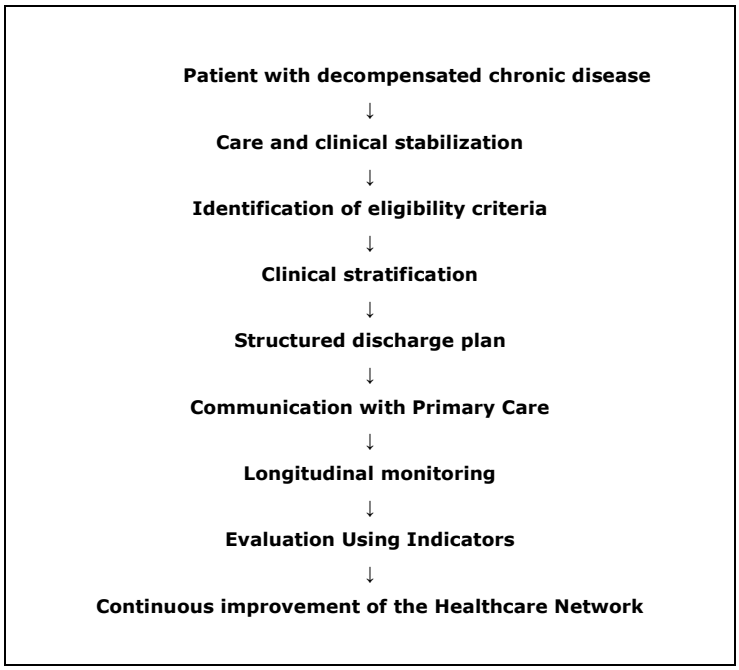
## RESULTS

### Development of the Organizational Model

An organizational model was developed to strengthen the coordination of care for patients with decompensated chronic diseases treated at a public emergency department, positioning

the emergency department as a strategic point of integration with the Healthcare Network. The model incorporates care coordination into the unit's care flow, organizing the identification of eligible patients, the transition to Primary Health Care, and the monitoring of continuity of care. Figure 1 presents the institutional care flow developed.

**Figure 1 -** Organizational model for care coordination between the emergency department and Primary Health Care, Barueri (SP), Brazil, 2026.




**Source:** Prepared by the authors.

## Organizational Components of the Model

The model was structured around five organizational components that guide the coordination of care between emergency care and primary health care, as presented in Table 1.

**Table 1 -** Organizational components of the care coordination model, Barueri (SP), Brazil, 2026.

| Component | Purpose |
|---|---|
| Eligibility Criteria | Identify priority patients for care coordination |
| Structured discharge plan | Organize follow-up after clinical stabilization |
| Communication between levels of care | Sharing information between the emergency department and primary care |
| Longitudinal monitoring | Ensuring continuity of care |
| Indicators | Assessing performance and continuous improvement |

**Source:** Prepared by the authors.

## Process Indicators

Process and outcome indicators were defined to monitor the implementation of the model and evaluate its contribution to care coordination, continuity of care, and integration between emergency care and primary health care. The proposed indicators are presented in Table 2.

**Table 2 -** Indicators of the organizational model for care coordination, Barueri (SP), Brazil, 2026.

| Type | Indicator | Objective |
|---|---|---|
| Process | Eligible patients identified | To assess the ability to identify priority patients for care coordination. |
| Process | Structured discharge plans developed | Verify adherence to the organizational model. |
| Process | Communication with Primary Health Care | Assess integration among the different levels of care. |
| Process | Referrals Made | Monitor continuity of care after discharge from the emergency department. |
| Outcome | Attendance at primary care after discharge | Assess continuity of care. |
| Result | Return to the emergency department within 30 days | Assess early recurrence of visits. |
| Outcome | Return to the emergency department within 90 days | Assess the effectiveness of longitudinal follow-up. |
| Result | Potentially preventable hospitalizations | Assess care outcomes related to chronic conditions. |
| Outcome | Continuity of care | Assess the integration among the points in the Healthcare Network. |

**Source:** Prepared by the authors.

## Organization of the Care Flow

The model established an institutional workflow based on the identification of eligible patients, clinical stratification, a structured discharge plan, communication with Primary Care, and longitudinal monitoring. This organization expands the role of the emergency department in coordinating care and establishes a permanent framework for evaluation using indicators, promoting continuous improvement of care processes.

# DISCUSSION

The main finding of this report was the development of an organizational model capable of incorporating care coordination into the care flow of a public emergency department, expanding the traditional role of these services within the Health Care Network.

Unlike models focused exclusively on the clinical stabilization of acute episodes, the proposed model positions the emergency department as a strategic hub for identifying patients with decompensated chronic diseases, developing structured discharge plans, and coordinating with Primary Health Care. This reorganization enhances the service's capacity to contribute to continuity of care and to reduce fragmentation of care.

Care coordination is internationally recognized as one of the essential attributes of Primary Health Care and one of the main mechanisms for improving the quality of systems organized into care networks[5,7,9-10]. However, its effectiveness depends on the existence of formal processes for communication, information sharing, and accountability among the different levels of care.

The model developed seeks to address this need by establishing objective eligibility criteria, standardized communication mechanisms, and longitudinal monitoring, thereby promoting integrated collaboration between emergency care and Primary Health Care. In this sense, the initiative aligns the emergency care service with the logic of Health Care Networks, reducing barriers traditionally associated with fragmented care.

Another important aspect concerns the continuity of care following discharge from the emergency department. The literature shows that patients with chronic diseases often experience discontinuity of care during the transition between different services, especially when there are no structured discharge plans or effective communication among the professionals involved [7–11]. These gaps contribute to patients dropping out of follow-up care, repeated use of emergency services, and potentially avoidable hospitalizations. The proposed model aims to transform discharge from the emergency department into an organized care transition process, in which the definition of follow-up care becomes an integral part of the therapeutic planning carried out during the management of the acute episode.

This perspective aligns directly with contemporary care transition models[2,11], which are widely used in health systems oriented toward integrated care. More than a simple administrative transfer of the patient between services, care transition requires structured sharing of clinical information, a clear definition of responsibilities among professionals, and longitudinal follow-up after discharge. By incorporating these steps into the institutional workflow, the model enhances patient safety, reduces information loss between different points in the network, and expands the institutional capacity to coordinate more continuous and effective care pathways.

The proposal also includes elements related to patient navigation[12]. Although originally developed for cancer patients and vulnerable populations, navigation models have been progressively incorporated into the management of chronic diseases because they promote timely access to services, reduce organizational barriers, and support patients throughout their care journey. In the model described here, the identification of eligible patients, the development of a structured discharge plan, and longitudinal monitoring constitute organizational mechanisms that facilitate the user's navigation through the healthcare system, contributing to greater integration among the different levels of care.

From a health management perspective, the model also aligns with the principles of Value-Based Healthcare[4,13], by shifting the focus of care from the isolated resolution of an acute episode to the generation of value throughout the patient's care journey. The incorporation of indicators related to primary care visits, repeat visits, potentially preventable hospitalizations, and continuity of care expands the ability to assess outcomes relevant to patients, managers, and health systems. Thus, the emergency department is no longer understood solely as a place for the immediate resolution of clinical complications but becomes an integral part of strategies aimed at producing better health outcomes, more efficient use of resources, and strengthening care coordination.

Although the model was developed in a single public emergency department, its organizational components have the potential to be adapted to different contexts within the Unified Health System[1,8]. Eligibility criteria, structured discharge plans, standardized communication, longitudinal monitoring, and evaluation using indicators constitute strategies compatible with different levels of care complexity and can be progressively incorporated by other institutions interested in strengthening the integration between emergency care and primary care. This characteristic expands the possibility of replicating the experience and reinforces its potential as a tool for reorganizing care processes.

Finally, this report broadens understanding of the strategic role of emergency services in the healthcare network[1,8] by demonstrating that these services can act as important mechanisms for coordinating care[5-7] for patients with chronic diseases. By integrating principles of Primary Care, care transitions, patient navigation, and Value-Based Healthcare[4,13], the model presented helps reduce fragmentation in care and offers an organizational strategy that could potentially be applied to other public health services seeking to strengthen continuity of care and the integration of Health Care Networks.

## Study Limitations

This study has limitations inherent to the case report design and the organizational nature of the described intervention. The model was developed based on the reality of a single municipal public emergency department, within the specific context of the Healthcare Network, which may limit its direct transferability to institutions with different clinical, organizational, and structural characteristics.

Furthermore, the manuscript describes the development of an organizational model and its components but does not include a quantitative assessment of its implementation or its impacts on care indicators and clinical outcomes. Thus, although process and outcome indicators were defined to monitor its implementation, the model's effectiveness must be confirmed in future studies that evaluate its application in different organizational contexts.

Another limitation relates to the inherent complexity of care coordination, which depends not only on the processes developed in the emergency department but also on the capacity for coordination among the different points in the Healthcare Network, the availability of resources in Primary Care, inter-institutional communication, and the engagement of the professionals involved. These factors may influence the implementation and outcomes of the model in different settings.

Despite these limitations, the systematic description of the organizational model—grounded in scientific evidence and aligned with the principles of care coordination, health care networks, and quality improvement—offers a potentially applicable framework to support care integration initiatives in other public urgent and emergency care services.

## Contributions to Science

This report contributes to a broader understanding of the strategic role of urgent and emergency care services in coordinating care for people with chronic diseases, demonstrating that these services can act as active components of the Health Care Network and not merely as facilities dedicated to managing acute episodes.

By structuring an organizational model based on eligibility criteria, a structured discharge plan, communication across care levels, longitudinal monitoring, and performance indicators, the study offers a systematic framework for strengthening integration between urgent care and primary health care.

The proposed model also broadens the dialogue between the frameworks of care coordination, care transitions, patient navigation, and value-based healthcare, bringing concepts widely discussed in the international literature closer to the organizational reality of the Unified Health System. In this way, it helps bridge the gap between scientific research and the practical implementation of strategies aimed at ensuring continuity of care and integrating healthcare networks.

Furthermore, the study provides an organizational structure that could potentially be replicated in other public urgent and emergency care services, offering guidance to managers, professionals, and researchers interested in reorganizing care processes, strengthening network governance, and implementing care models centered on the needs of people with chronic conditions.

## CONCLUSION

The organizational model developed demonstrates that public urgent care services can play a strategic role in coordinating care for people with chronic diseases, expanding their scope beyond the clinical stabilization of acute episodes. By incorporating structured eligibility criteria, a discharge plan, communication among different levels of care, longitudinal monitoring, and evaluation using indicators, the model strengthens the integration between emergency care and primary health care, promoting continuity of care and reducing fragmentation of care.

The results show that organizing institutional workflows focused on care transitions makes it possible to transform discharge from the emergency department into an opportunity to reorganize patients' care pathways within the healthcare network. Thus, care coordination ceases to be an exclusive responsibility of primary care and becomes a shared responsibility among the different points in the network, strengthening clinical governance and service integration.

Although the model was developed within the specific context of the Unified Health System, its organizational components have the potential to be adapted to different public urgent and emergency care services, taking into account local particularities and varying levels of organizational maturity. The use of process and outcome indicators also provides the means to continuously monitor its implementation and support ongoing cycles of quality improvement.

Finally, this report reinforces that the reorganization of care processes represents a viable strategy for strengthening care coordination and continuity of care for people with chronic diseases. The experience presented expands the role of urgent care within the Healthcare Network, offering a potentially replicable organizational model for other services within the Unified Health System and laying the groundwork for future evaluations of its impacts on clinical and organizational outcomes and on the generation of value in healthcare.

## AUTHORS' CONTRIBUTION

Transparency in authors' contributions according to the CRediT Taxonomy.

| | |
|---|---|
| **Conceptualization** | Eduardo Luna de Oliveira Torres |
| **Data Curation** | Eduardo Luna de Oliveira Torres |
| **Formal Analysis** | Not applicable |
| **Funding Acquisition** | Not applicable |
| **Investigation** | Eduardo Luna de Oliveira Torres |
| **Methodology** | Eduardo Luna de Oliveira Torres |
| **Project Administration** | Eduardo Luna de Oliveira Torres |
| **Resources** | Eduardo Luna de Oliveira Torres |
| **Software** | Not applicable |
| **Supervision** | Eduardo Luna de Oliveira Torres |
| **Validation** | Eduardo Luna de Oliveira Torres |
| **Visualization** | Eduardo Luna de Oliveira Torres |
| **Writing - Original Draft Preparation** | Eduardo Luna de Oliveira Torres |
| **Writing – Review & Editing** | Eduardo Luna de Oliveira Torres |

## STATEMENTS

| | |
|---|---|
| **Conflicts of interest** | Not applicable |
| **Funding** | Not applicable |
| **Ethical approval** | Not applicable |
| **Acknowledgments** | Not applicable |
| **Preprint** | Not applicable |
| **Artificial Intelligence** | Not applicable |

## TRANSLATION

The translation of this article was assisted by DeepL Translator artificial intelligence from the original version written in Portuguese (Brazil). The translated version was submitted to the editorial team for curation, consisting of a limited scope editorial review. Translations assisted by artificial intelligence may vary from the native language.

## REFERENCES

1. Mendes EV. As redes de atenção à saúde. 2nd ed. Brasília: Organização Pan-Americana da Saúde; 2011.
2. Naylor MD, Aiken LH, Kurtzman ET, Olds DM, Hirschman KB. The care span: the importance of transitional care in achieving health reform. Health Aff. 2011;30(4):746-754.
3. Berwick DM, Nolan TW, Whittington J. The Triple Aim: care, health, and cost. Health Aff. 2008;27(3):759-769.
4. Porter ME. What is value in health care? N Engl J Med. 2010;363(26):2477-2481.
5. Halberstadt BMK, Bousquat A, Almeida PF, et al. Coordenação do cuidado de usuários com condições crônicas na atenção primária à saúde: descrição interpretativa. Texto Contexto Enferm. 2025;34:e20240258. doi:10.1590/1980-265X-TCE-2024-0258pt.
6. Polati AM, Sarti TD, Fontenelle LF, Almeida PSC. Coordenação de cuidados na atenção primária para indivíduos com doenças crônicas. Medicina (Ribeirão Preto). 2024;57(4):e220586. doi:10.11606/issn.2176-7262.rmrp.2024.220586.
7. Khatri R, et al. Continuity and care coordination of primary health care: a scoping review. BMC Health Serv Res. 2023;23:750. doi:10.1186/s12913-023-09718-8.
8. Brasil. Ministério da Saúde. Portaria nº 4.279, de 30 de dezembro de 2010. Estabelece diretrizes para organização da Rede de Atenção à Saúde no âmbito do Sistema Único de Saúde (SUS). Brasília: Ministério da Saúde; 2010.
9. Starfield B. Primary care: balancing health needs, services, and technology. New York: Oxford University Press; 1998.
10. Gerlach FM, et al. A strong and sustainable primary care system is associated with a lower risk of hospitalization in high-risk patients. Sci Rep. 2021;11:4349. doi:10.1038/s41598-021-83962-y.
11. Coleman EA, Boult C. Improving the quality of transitional care for persons with complex care needs. J Am Geriatr Soc. 2003;51(4):556-557.
12. Freeman HP. The origin, evolution, and principles of patient navigation. Cancer Epidemiol Biomarkers Prev. 2012;21(10):1614-1617.
13. Bodenheimer T, Sinsky C. From Triple to Quadruple Aim: care of the patient requires care of the provider. Ann Fam Med. 2014;12(6):573-576.
14. Ogrinc G, Davies L, Goodman D, Batalden P, Davidoff F, Stevens D. SQUIRE 2.0 (Standards for QUality Improvement Reporting Excellence): revised publication guidelines from a detailed consensus process. BMJ Qual Saf. 2016;25(12):986-992. doi:10.1136/bmjqs-2015-004411.