





Fighting health crisis with solidarity

Managing the surge of severe patients at the start of the COVID pandemic

Olivier Grimaud, Anne Girault, Paula Cucharero, Emmanuelle Leray, Sahar Bayat, Jean-Marc Philippe, François Braun and Julien Pottecher

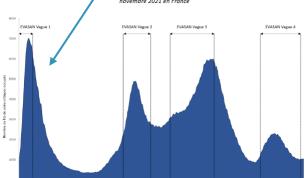


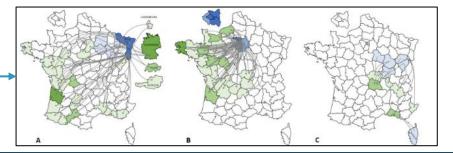


Background

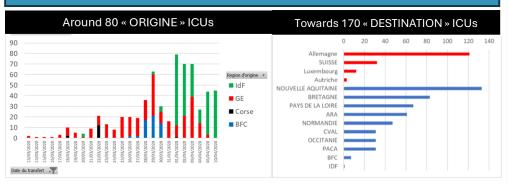
First COVID-19 wave Spring 2020







From 13/03 to 10/04/2020 : 661 Transfers 168 international 493 *inter-regions*







Innovations => needs evaluation

Innovative features:

- High intensity « Mass » transfers
- Horizontal and vertical collaborations
- Pionneering high-speed-train as vector





TRANSCOV















Multidisciplinary evaluation of inter-ICUs transfer of COVID-19 patients

Qualitative study

- Managerial component
- Clinical component

Retrosp. Cohort

- Transf. vs controls
- Main outcome: 28days
 ICU case fatality



























Qualitative study: method

Semi-directive interviews (n=40)

June 2020 to October 2021

Recorded and transcribed

Component	Name	nb
Managerial	Dir. Gen. Santé (national)	2
	Regional Health Agencies	9
	Army	6
	Academic Societies	7
Clinical	"Origin" (sending) hosp.	8
	"Destination" (receiving) hosp.	8



Thematic analysis



Qualitative study: results

Mass-transfers: success despite difficult circumstances

Scaling up: from "routine bi-lateral procedure" to orchestration of mass transfer at national level

A logistical challenge: volume of patients, distances, variability of vectors

Organisational challenge: e.g. new cooperation with train company (SNCF)

Facilitating factors

The pre-existence of a **standardised transfer protocol** (Evasan)

The **full-scale simulation of train transfer** in the aftermath of the 2019 terrorist attack

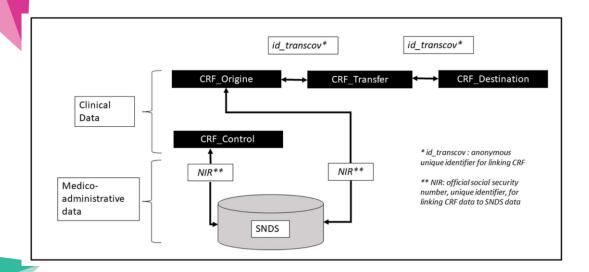
Experience and trust between crisis management professionals

The collective construction of a **common purpose/meaning** in the crisis context

See: Cucharero, Girault et al. La coordination d'acteurs multiples en situation extrême. Le cas des transferts extrarégionaux de patients Covid-19. (RIMHE 2022, 2023)



TRANSCOV COHORT: method



Participation

- 46/70 « origin »
- 65/146 « destination »

Patients involved:

- 502 transferred
- 1280 controls

See : Grimaud et al, Transcov cohort protocol, (BMJ Open 2021)



TRANSCOV COHORT: Results

Main results

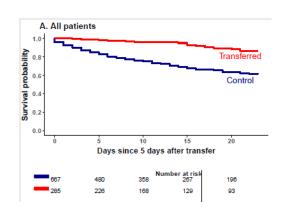
No major adverse events during and shortly after transfer

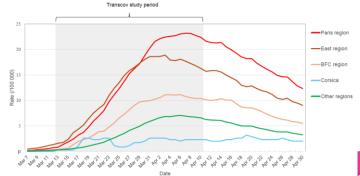
Confirmation of much lower mortality associated with transfer

Interpretation

Selection of healthier patients for medical evacuation => better survival

Overwhelmed sending ICUs versus comparatively "idle" receiving ICUs





#EHIMA2025





Conclusion

From a clinical point of view

- Mass transfers of severe ICU patients was safe
- Inter-regional and international solidarity saved lives
- Probably better to transfer patients as early as possible (to avoid overburden)

From a managerial point of view

- Pre-crisis trust & cooperation between services helped +++
- Performing under overwhelming burden of care is difficult
- Even in non-crisis situations, the patient/staff ratio is a critical factor in ICU
- Need to strike the right balance between competition and cooperation



THANK YOU



Acknowledgment

To all participating ICUs & interviewees

To the EHESP Transcov support team: Christophe Fermanian, Yasmine El Gharabawy, Sylvie Martin, Maïlys Tisseau-Menez, Annick Duclos, Nathalie Gilbert-Jaouen.

To the clinical research @CHU Rennes team : Kristell Coat, Mathilde Léonard , Alain Renault.

To all members of the TRANSCOV steering comity

To funding agencies: DGS - CAPNET & ANRS MIE.