OASES

Promoting evidence-based reforms on medical deserts

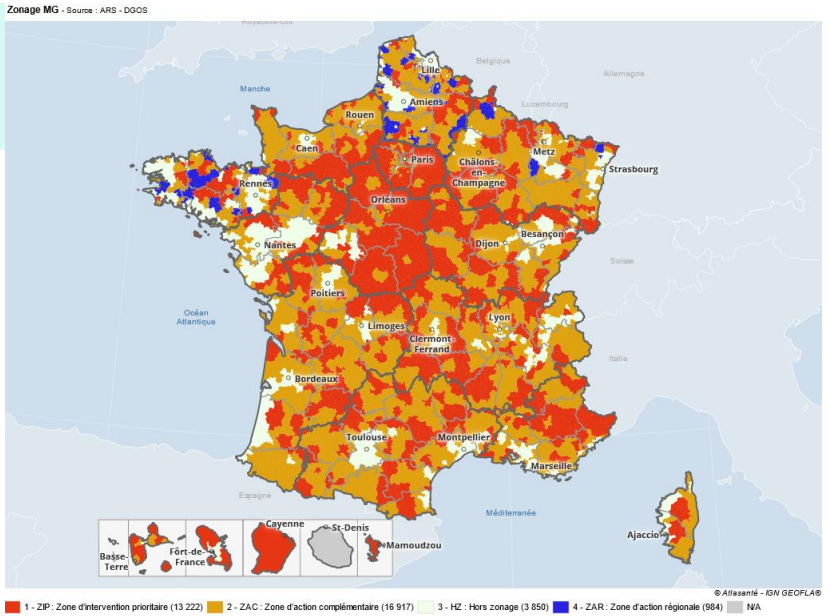
French policies to mitigate « medical deserts » : the examples of Primary care teams and limiting nurses installations in overserved areas

Guillaume Chevillard, chevillard@irdes.fr
Institute for Research and Information in Health Economics (IRDES)
WP4- IRDES/EHESP

OASES Promoting evidence-based reforms on medical deserts

The french context

- In 2022, 30% population lives in a « medical desert » (GPs)
- Medical deserts first appears in rural areas… Now it concerns all kind of places
- Medical desertification starts in the end of 2000's and will continue until 2030
- And is more intense in « rural fringes »
- But, during the same time, there is an increase in the number of nurses, midwifes, physiotherapists



OASES Promoting evidence-based reforms on medical deserts

The french answers to improve accessibility to GPs

Since 2005, 3 types of measures have been deployed by public authorities :

1/ Increase the number of doctors :

⇒*formation (medical students), foreign-trained doctors*

2/ attract and retain GPs in medical deserts

⇒*financial incentives,* ***improvement of working conditions (through PCTs)***

3/ Increase the GPs availability and reorganization of primary care delivery *:*

⇒*physician assistant, skill-mix with nurses, coordinate exercice, territorial organization of primary care…*

OASES Promoting evidence-based reforms on medical deserts

The french answers to improve accessibility to GPs

The political debate still occurs about :

-**Limiting installations in « overserved areas »** such as it exists for nurses, physiotherapist and midwifes (Duchaine et al., 2022)

-Add a 4th year of medical internship primarily in medical deserts (PLFSS, 2022)

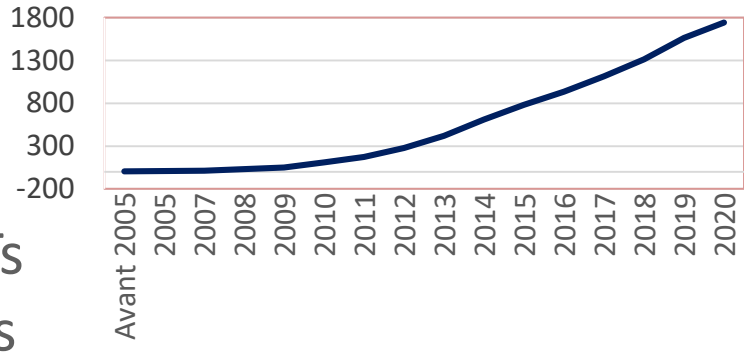
OASES Promoting evidence-based reforms on medical deserts

1
The Primary care teams : a way to attract and retain doctors in medical deserts ?

Chevillard, G., Mousquès, J., 2021. Medically underserved areas: are primary care teams efficient at attracting and retaining general practitioners? *Social Science & Medicine* 287, 114358.

OASES Promoting evidence-based reforms on medical deserts

The primary care teams

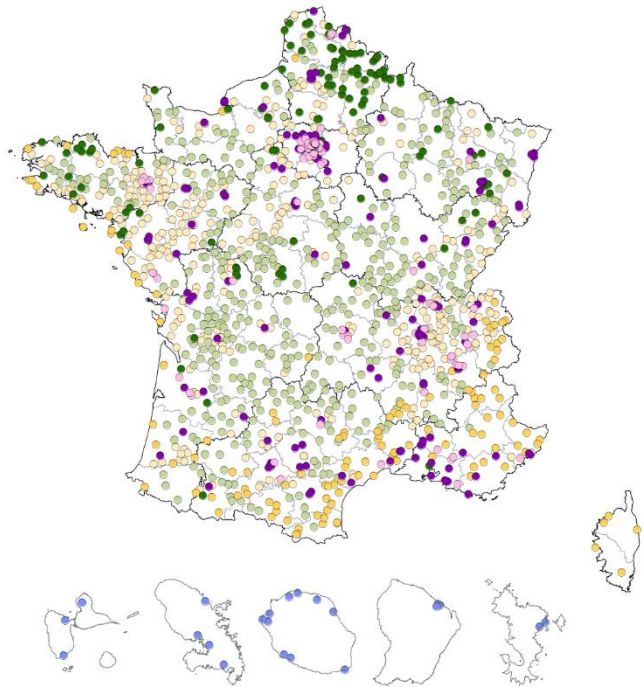


PCTs groups GPs and others paramedics that are self-employed

Public authorities financially support PCTs for their construction and operating costs

An exponential increase : 20 in 2008 => 2000 in 2022

PCTs are primarily in medical deserts (67%) : rural fringes and suburban areas



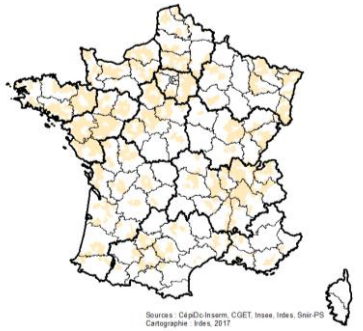
Impact on GPs density evolution ?

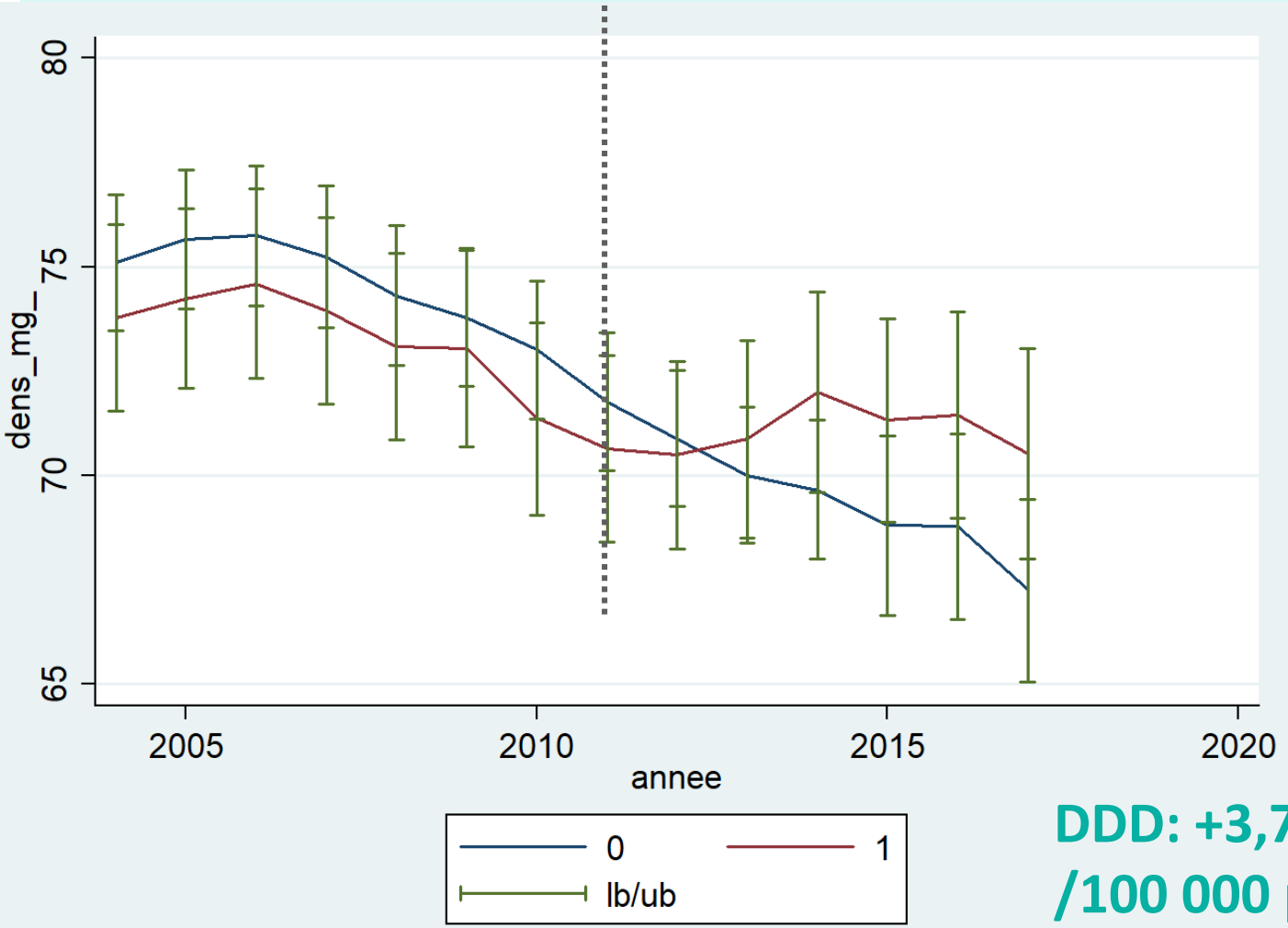
⇒ Comparison of GPs evolution in similar type of areas with and without PCTs

⇒ Suburban areas then rural fringes

OASES Promoting evidence-based reforms on medical deserts

Evolution of GPs densities in suburban areas with (red) and without PCTs (blue) between 2004 and 2017

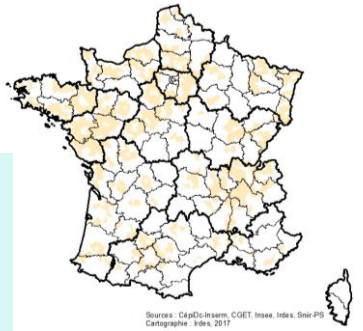


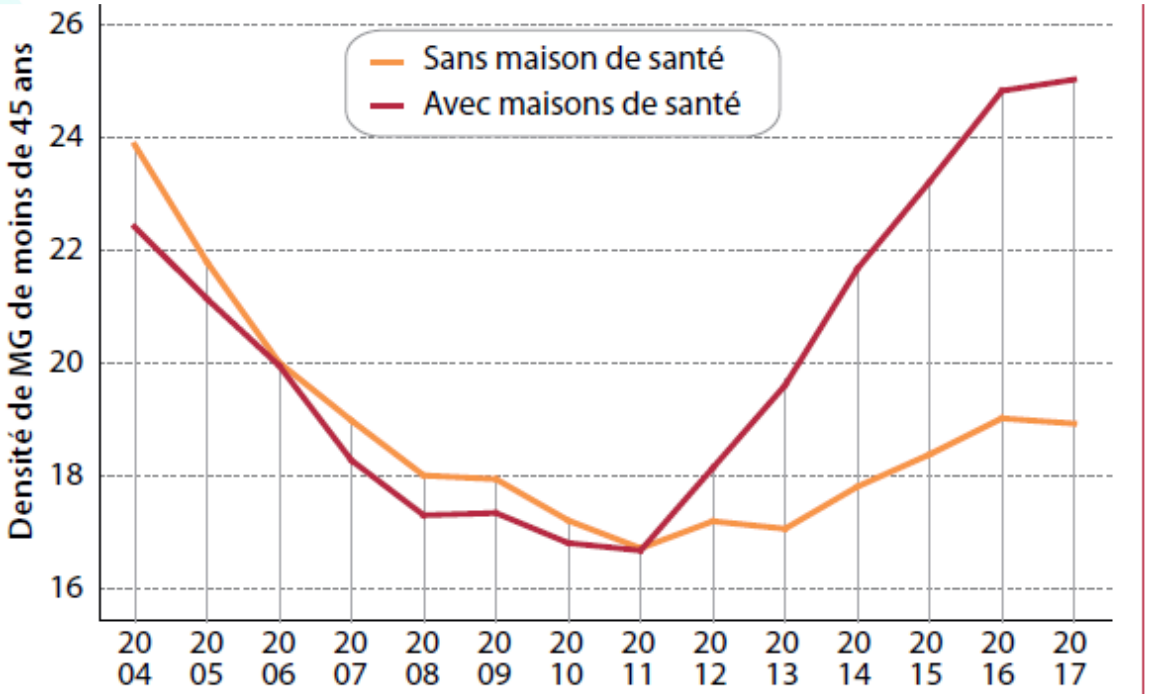


DDD: +3,7 GPs /100 000 p.

OASES Promoting evidence-based reforms on medical deserts

Evolution of young GPs densities in suburban areas with (red) and without PCTs (blue) between 2004 and 2017



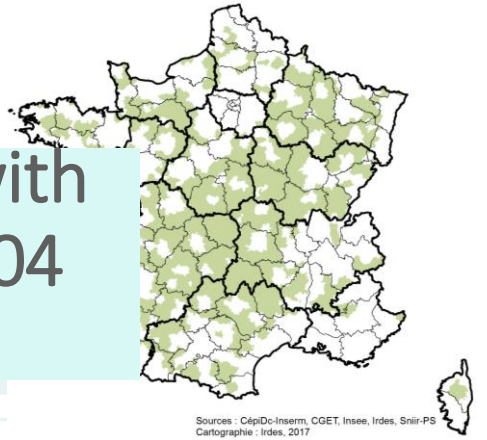


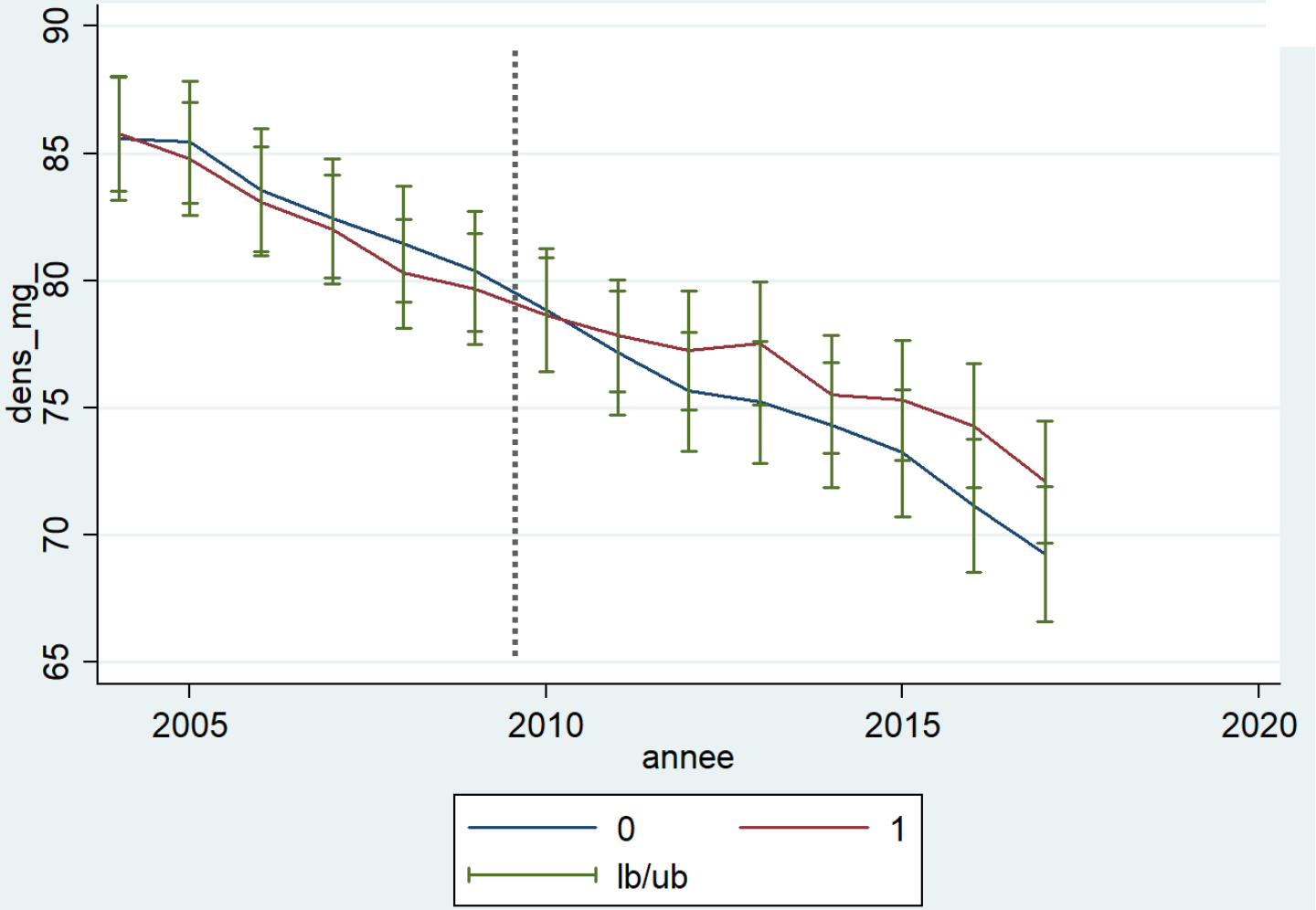
Note : Pour simplifier le graphique, les espaces traités correspondent aux territoires de vie avec au moins une maison de santé ouverte sur la période 2008-2016.

Sources : Snir-PS, Assurance maladie, Observatoire des recompositions de l'offre de soins, (DGOS).

OASES Promoting evidence-based reforms on medical deserts

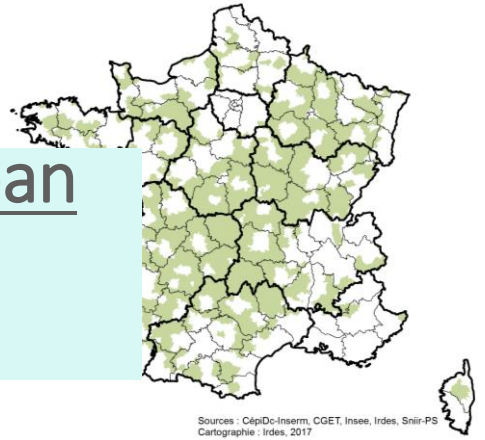
Evolution of GPs densities in rural fringes with (red) and without PCTs (blue) between 2004 and 2017

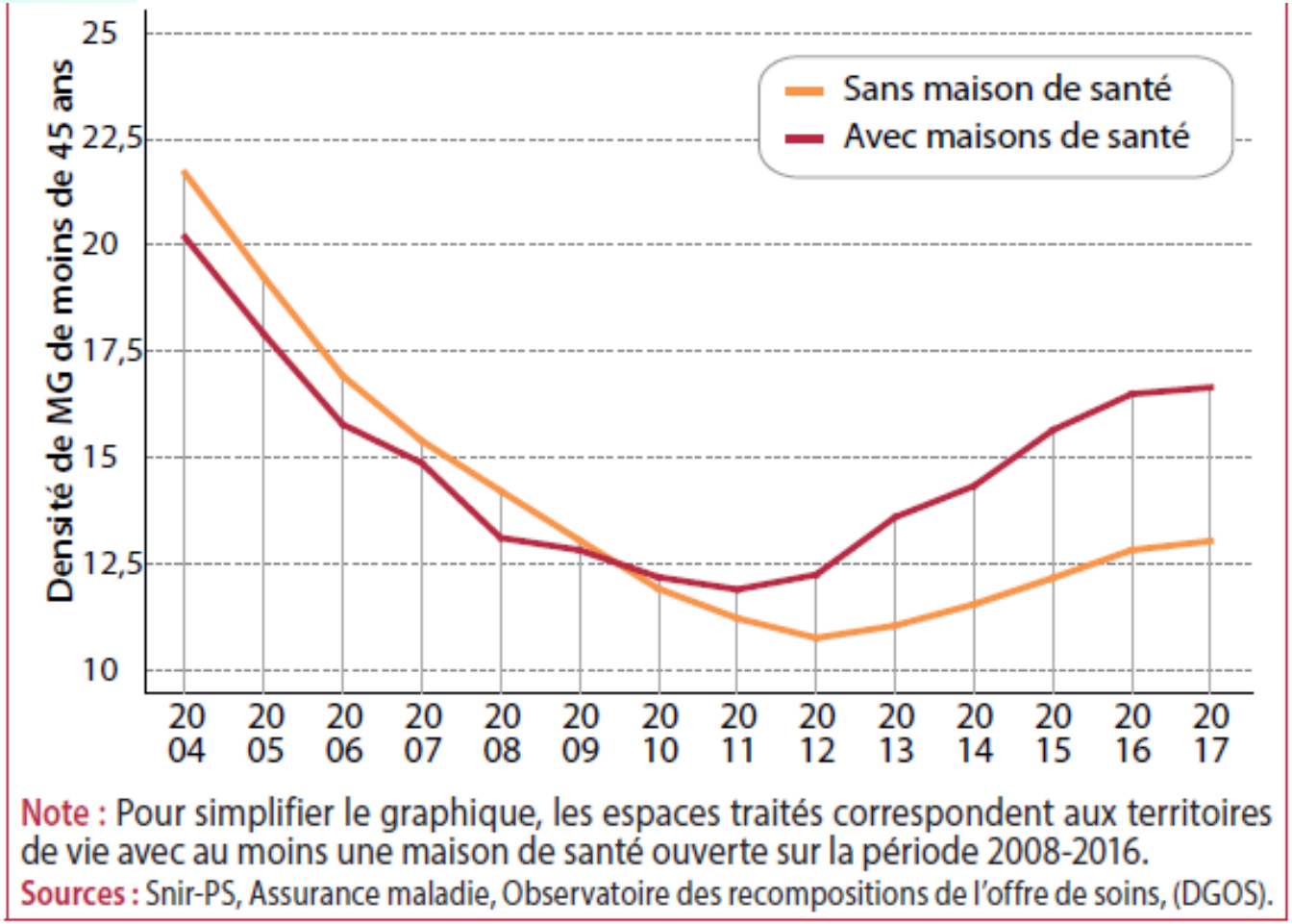




OASES Promoting evidence-based reforms on medical deserts

Evolution of young GPs densities in suburban areas with (red) and without PCTs (blue) between 2004 and 2017





Note : Pour simplifier le graphique, les espaces traités correspondent aux territoires de vie avec au moins une maison de santé ouverte sur la période 2008-2016.

Sources : Snir-PS, Assurance maladie, Observatoire des recompositions de l'offre de soins, (DGOS).

OASES Promoting evidence-based reforms on medical deserts

The primary care teams – Take home message

Areas with PCTs have a better evolution of GPs and young GPs densities than similar areas without PCTs
The impact of PCTs is mainly explained by the attractivity for young GPs
The impact of PCTs is not the same according to the type of territories
Due to the global decrease of GPs, **in rural fringes**, PCTs are not sufficient to mitigate the medical desertification

But, GPs in PCTs see more patients than others ones (Cassou et al., 2022)

=> PCT is a way to both attract young GPs in medical deserts and to produce more care

Others complementary answers than PCTs are required with short and long term vision : improve coordination and cooperation, skill-mix with paramedics etc., recruitment of student

2

Limiting nurses installations in overserved areas : a way to improve their geographical distribution ?

Duchaine F., Chevillard G., Mousquès J., 2022,Impact of licensure to practice limitations and financial incentives on the geograhical distribution of nurses in France, *Revue d'économie régionale et urbaine*

OASES Promoting evidence-based reforms on medical deserts

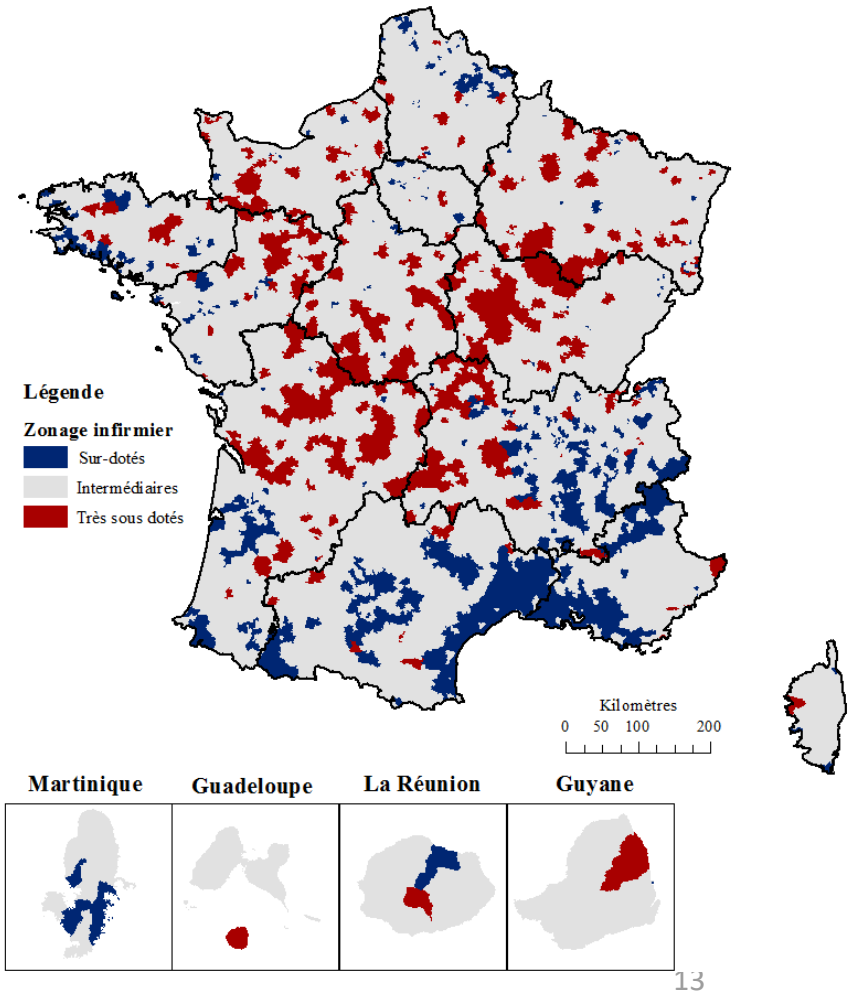
Self-employed nurses in France

The number of self-employed nurses increase in France since 2006
There are still geographical disparities, but they are reducing

Since 2012, public authorities defined a limitation of installation (practice permits) for nurses in « overserved » areas (blue areas)
And financial incentives in underserved areas (red areas)

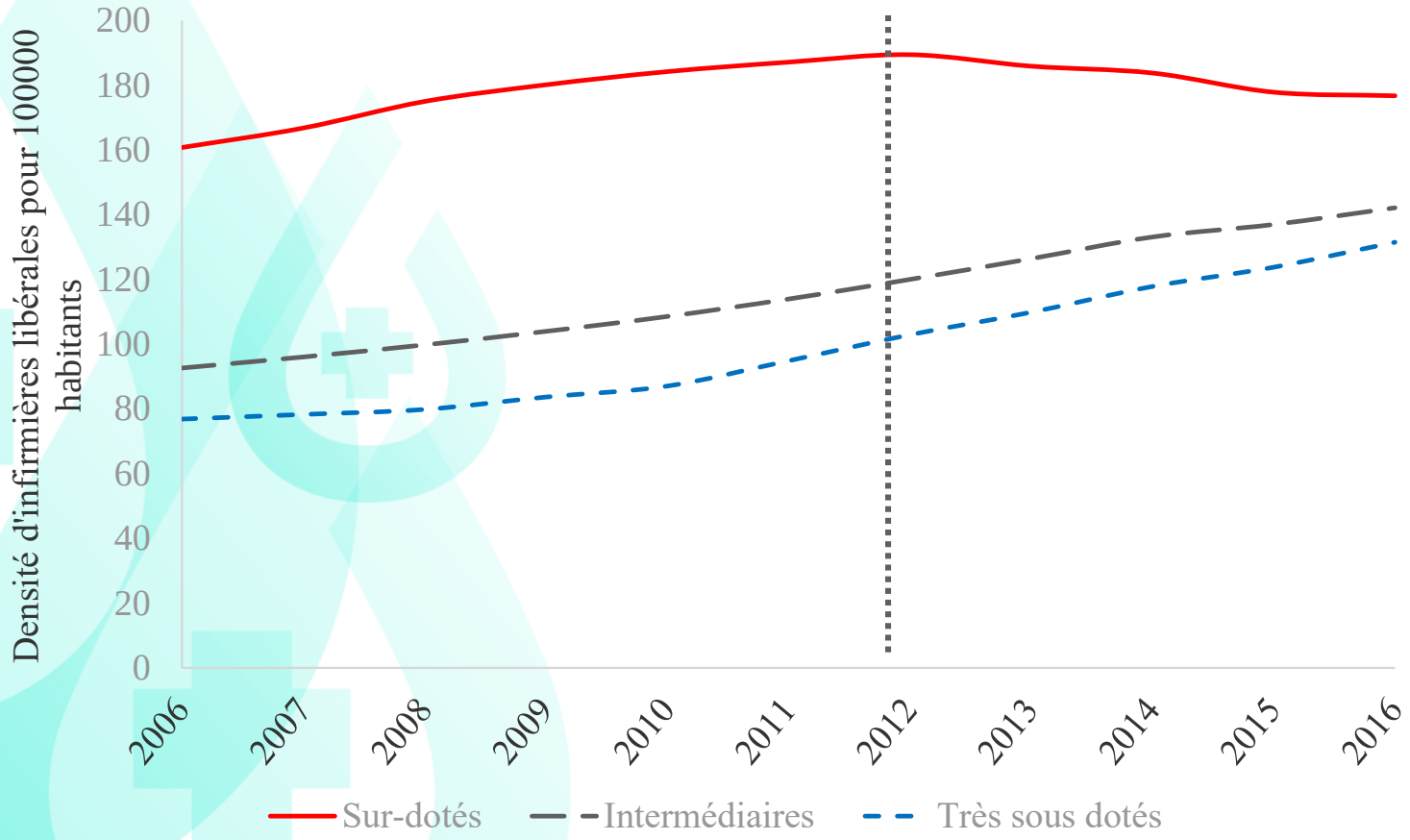
Was this type of regulation efficient to reduce geographical inequalities?

⇒ Comparison of nurses density evolution between overserved areas and « similar » ones
⇒ Idem for underserved areas compared turn-over « similar » ones (matching)



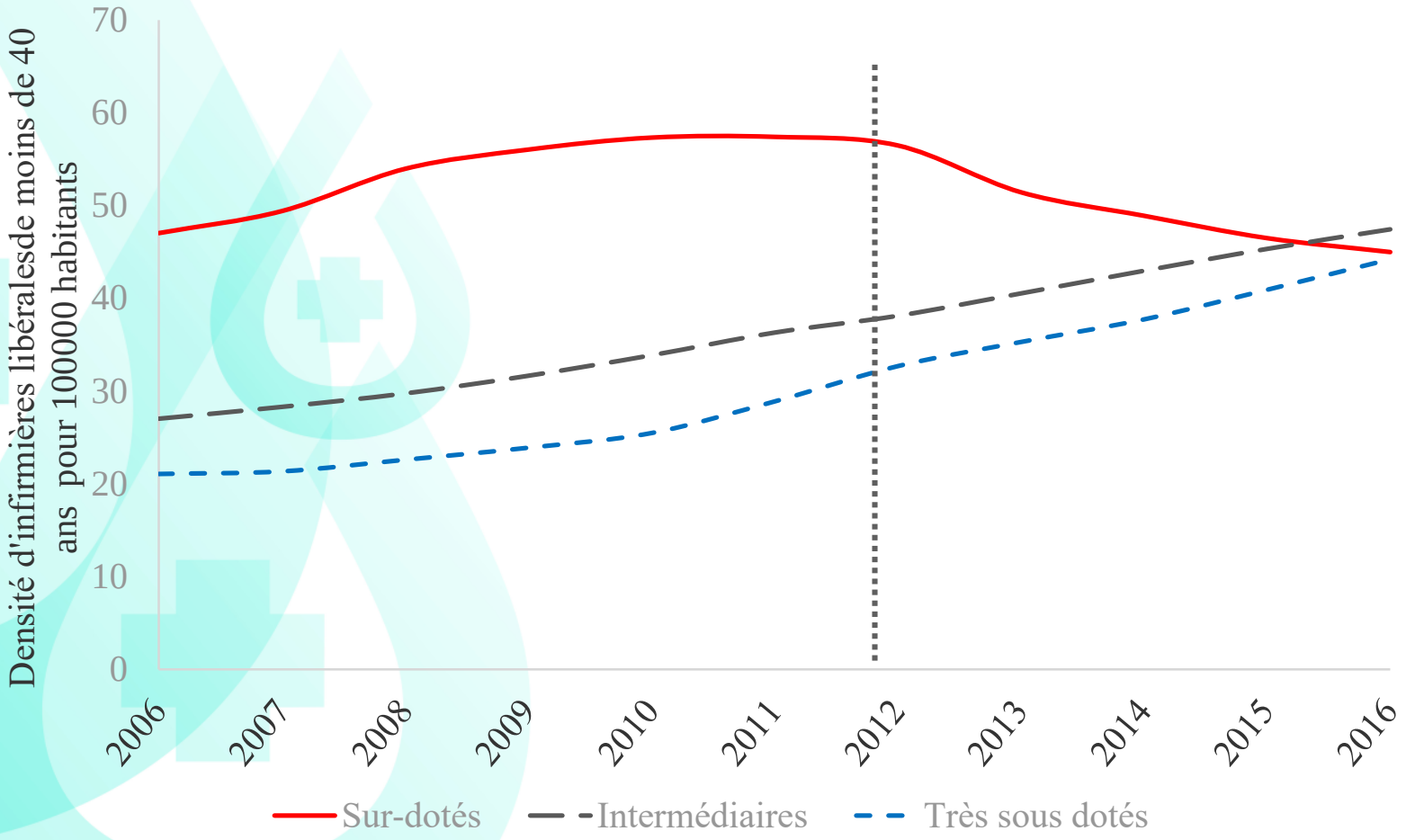
OASES Promoting evidence-based reforms on medical deserts

Evolution of the density of self-employed nurses in underseved (blue) and overserved (red) areas between 2006 et 2016



OASES Promoting evidence-based reforms on medical deserts

Evolution of the density of young self-employed nurses in underseved and overserved areas between 2006 et 2016



OASES Promoting evidence-based reforms on medical deserts

Limiting nurses installations – Take home message

A good answers in a context of an increasing number of nurses

- It's very efficient to limit the increase of nurses density in overserved areas, and especially of young nurses

- But it does not benefit to underserved areas much more than to intermediate areas (same trend of progression)

OASES Promoting evidence-based reforms on medical deserts

Thank you!

chevillard@irdes.fr
mousques@irdes.fr
duchaine@irdes.fr

Co-funded by the Health Programme of the European Union

The content of this presentation represents the views of the author only and is his/her sole responsibility; it cannot be considered to reflect the views of the European Commission and/or the Consumers, Health, Agriculture and Food Executive Agency(CHAFEA) or any other body of the European Union. The European Commission and the Agency do not accept any responsibility for use that may be made of the information it contains.

Design (1) : matching by type of geographical areas

OASES Promoting evidence-based reforms on medical deserts

Pop. Charac. (National Institute for Statistics and Economic Studies, census data)

Density and activity of self-employed nurses (National Health Insurance, claims data)

Law + RHAs : areas with/without limitation/financial incentives

Rural catchment areas (*bassins de vie*) or urban units (*pseudos-cantons*) level depending on the pop. size (> or <30,000 inhab.)